KPMG Peat Marwick Stevenson & Kellogg

Management Consultants

Project Report

KPMG Peat Marwick Stevenson & Kellogg
Management Consultants

Project Report

A STUDY OF CLAIMS COSTS DURING THE 1980-1988 PERIOD

Prepared for

Workers Compensation Board of Manitoba
Winnipeg, Manitoba

Prepared by

Lynn Raskin-Levine
Stewart Clatworthy
John Giavedoni

Winnipeg
March 3, 1990
3590-05/ja

TABLE OF CONTENTS

Chapter			Page
I	INTRODUCTION		1
	A.	Principles of workers compensation in Manitoba	4
	B.	The study framework	5
	C.	Structure of the report	6
II	SUMMARY, CONCLUSIONS AND MAJOR FINDINGS		8
	A.	Summary	8
	B.	Conclusions	10
	C.	Major findings	11
III	AN OVERVIEW OF EXPENDITURE TRENDS DURING THE 1980 - 1988 PERIOD		20
IV	TEMPORARY TIME LOSS COMPENSATION EXPENDITURES		25
	A.	Trends in temporary time loss compensation expenditures	28
	B.	Effect of changes in claim volume	30
	C.	Effect of changes in benefit levels	32
	D.	Effect of changes in claim duration	34
	E.	Factors affecting claim volume, benefit levels and claim duration	38
		duration and benefit levels	38
	F.	The role of external factors	38
	G.	The role of internal factors	43
V	MEDICAL AID EXPENDITURES		49
	A.	Trends in medical aid expenditures	50
	B.	Changes in claim volume	53
	C.	Changes in billing rates	54
	D.	Changes in number of services billed	55
	E.	Changes in type of service	57
	F.	Changes in type of injury	58

Chapter			Page
VI	PENSIONS		59
	A.	Trends in pension expenditures	62
	B.	Inflation related factors	64
	C.	Claim volume	66
	D.	Impairment ratings	69
	E.	Benefit augmentation policy	70
	F.	Survivor benefit claims	72
VII	VOCATIONAL REHABILITATION EXPENDITURES		73
	A.	Trends in vocational rehabilitation expenditures	75
	B.	Changes in claim volume	77
	C.	Changes in cost of services	79
	D.	Changes in duration and mix of rehabilitation services	79
VIII	ADMINISTRATIVE COSTS		85
	A.	Salary expenditures	87
	B.	Non-salary expenditures	90
	C.	Workplace Safety and Health Act and workers advisor expenditures	90

o0o

I

INTRODUCTION

During the decade of the 1980's, many Workers Compensation Boards across Canada experienced unprecedented increases in operating expenses. Although similar to events in other provinces, cost increases experienced in Manitoba tended to outstrip those of other provinces, as illustrated by the ratio of benefits paid to the size of the provincial wage pool. (See Exhibit I-1.)

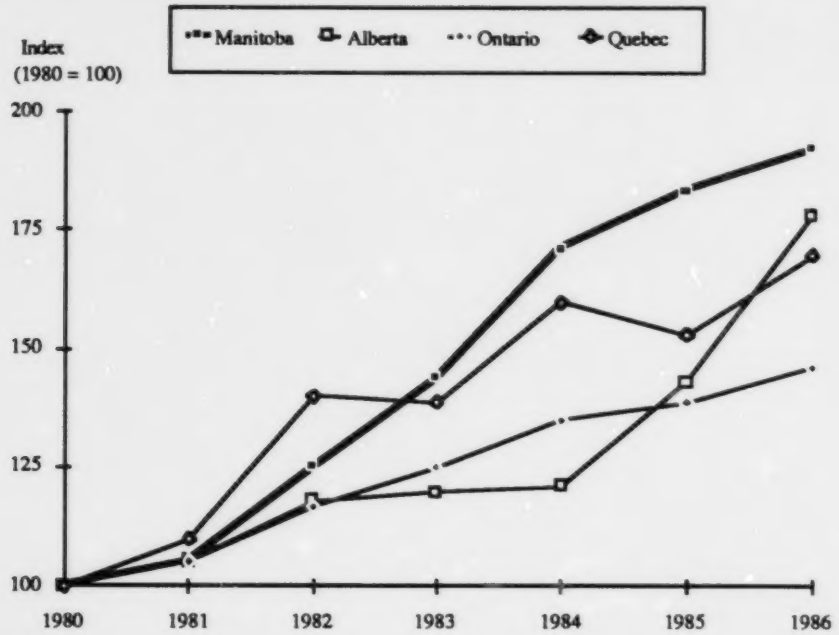
Annual operating costs of the WCB of Manitoba quadrupled during the 1980 - 1988 period from approximately $30.7 million to more than $119 million. Cost increases exceeded the rate of inflation throughout the time period and resulted in rapid and substantial increases in employer assessment rates. (See Exhibit I-2). Although employer assessment rates increased dramatically during the period, they tend to understate the true extent of increases in the costs of the program to employers. In addition to higher rates, employer contributions have also increased in response to inflation, which served to expand the size of assessable wage pool.

In spite of much higher employer assessments, the Board experienced several large operating deficits and a resultant unfunded liability which, in 1988, totaled more than $230 million. (See Exhibit I-3). Comparison of Exhibits I-2 and I-3 suggests during the 1980 - 1983 period, the Board did not react to rising costs by adjusting assessment rates. The failure to adjust assessments during this period led growth of the Board's deficit (and unfunded liability) and contributed to the need for subsequent assessment rate increases during the 1984 - 1988 period.

This study seeks to document the scale of operating cost increases experienced by the Workers Compensation Board (WCB) of Manitoba during the 1980-1988 period and where possible, to explain and quantify the contribution of a wide range of factors to cost increases. **The reader should be aware that the operating costs or expenditures reported in this study relate only to the cash outlays or disbursements made by the Board during the study period. As such, costs reported in this study differ from those contained in other WCB reports (e.g. annual reports) which employ accrual accounting procedures.**

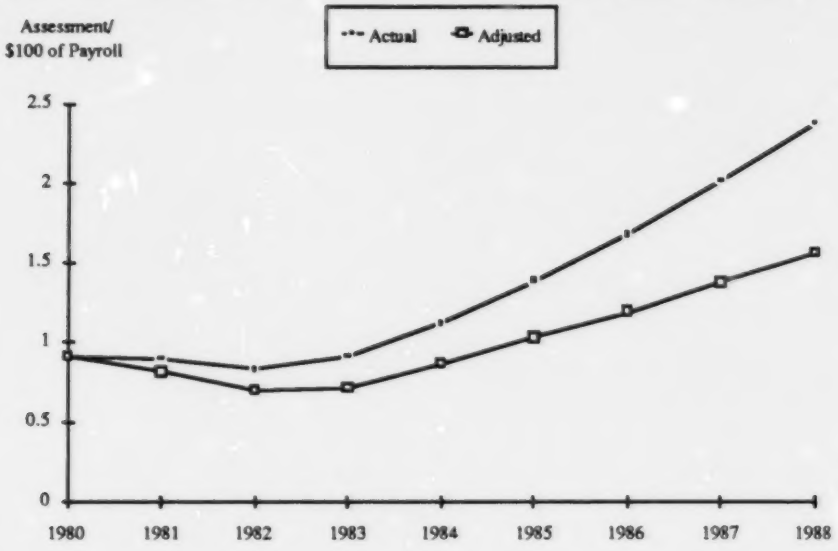
Interest in undertaking this study emerged initially in response to requests from employers for an analysis of WCB operating cost increases. The Board, however, concurred with the need to gain an understanding of the events which contributed to escalating costs during the period for purposes of better managing and forecasting future costs. In part, the decision by the WCB of Manitoba to pursue cost analysis appears to follow a broader national trend, as evidenced by the recent completion of similar analyses for the WCB's of Ontario and Alberta.

EXHIBIT I-1
Ratio of total benefit payments to total provincial wages, 1980-86
(Note: Indexed with 1980 = 100 for all provinces)



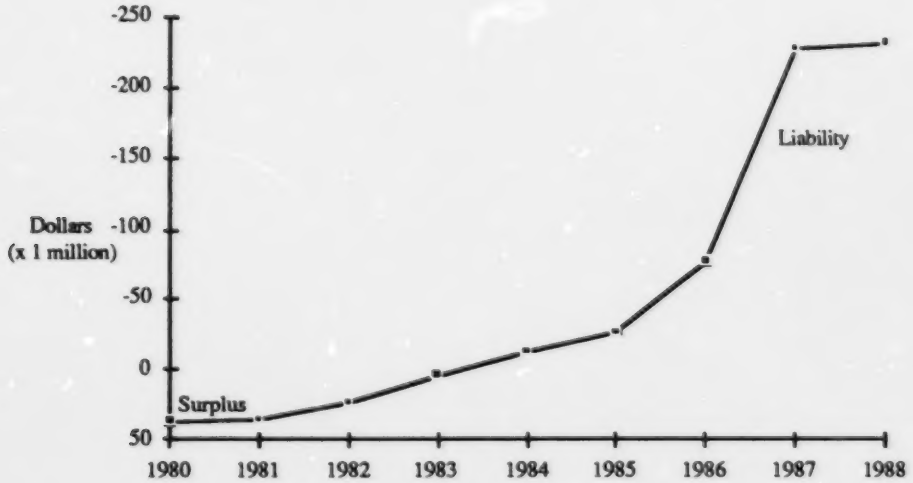
Manitoba	100	105	125	144	171	183	192
Alberta	100	105	118	120	121	143	178
Ontario	100	105	117	125	135	139	146
Quebec	100	110	140	139	160	153	170

EXHIBIT I-2
Average assessment rate per $100 of payroll for Class "E" employers
WCB of Manitoba, 1980 - 1988 (actual and adjusted for inflation)



Actual	0.898	0.889	0.822	0.898	1.11	1.382	1.67	2.004	2.371
Adjusted	0.898	0.807	0.693	0.711	0.853	1.014	1.185	1.369	1.559

EXHIBIT I-3
Accumulated reserve/unfunded liability
WCB of Manitoba, 1980 - 1988



	36.9	35.3	23.2	4.1	-13.7	-25.8	-77.5	-227.2	-232

A. PRINCIPLES OF WORKERS COMPENSATION IN MANITOBA

The current systems of workers compensation in Canada have evolved from legislation developed during the 1913-1915 period in Ontario in response to the findings and recommendations of the Meredith Commission. Systems operating in other Canadian provinces, including Manitoba, have evolved from the philosophy underlying the original Ontario system. The main principles developed in response to the Meredith Commission included:

- **The concept of no fault** under which the injured worker would gain the right to benefits without regard to to his or her own negligence and in turn yield up the right to sue the employer.
- **The concept of universal coverage** under which all workers would be eligible for benefits.
- **The concept of collective liability** under which all employers would share financial responsibility for benefits to injured workers.
- **The concept of industry funding** under which the entire costs of injured worker benefits would be covered through levies on employers.
- **The concept of state administration** under which the state would assume responsibility for the collection of employer contributions and the awarding and distribution of benefits to injured workers.

Although these principles continue to remain central to workers compensation systems across Canada and in Manitoba, the concepts of universal coverage and collective liability have not been not fully realized. A sizable number of workers remain uncovered by the program and select employers (including the railways and institutions of the government) have been allowed to self insure.

The workers compensation system was initially established to provide wage loss benefits to workers injured in industrial accidents. Over time, the system has evolved to include several additional dimensions such as medical aid benefits, permanent disability benefits and vocational rehabilitation services. In addition, the concepts of injury and accident have changed in response to progress in medical science and technology (e.g. the ability to identify new diseases and to establish linkages to the workplace). Eligibility for benefits under the program is now based primarily on proof of impairment and on reasonable causation that impairment arose out of and in the course of employment.

B. THE STUDY FRAMEWORK

The study investigates five components of the Board's operating costs, including:

- **Temporary time loss compensation** comprising benefits paid to workers who experience temporary wage loss as result of a work place related injury.

- **Medical aid benefits** comprising payments to medical institutions and practitioners for services provided to injured workers.

- **Permanent disability and survivor pension benefits** comprising payments to workers incurring permanent impairment as a result of injuries in the work place and to the survivors of workers fatally injured.

- **Vocational rehabilitation assistance** comprising payments for lost wages and services provided to workers who require special assistance (e.g. retraining) to enable them to return to the labour force.

- **Administration expenses** comprising payments for personnel, facilities and equipment required to deliver the Board's programs.

A very large and diverse range of factors have the potential to influence WCB costs. Conceptually, it is convenient to group these factors into two general categories, including:

- **External variables** over which the Board exerts little or no direct influence or control (such as worker wage rates, medical service billing rates and the volume, type or severity of accidents). Although the Board lacks direct control over external cost factors, it can (and may begin to) influence external events through such methods as safety programs.

- **Internal variables** over which the Board exerts or could exert some degree of direct influence or control (such as adjudication and appeal procedures, case monitoring and management practices).

The role and contribution of individual factors to expenditure changes are described in detail in the following sections of the report.

The study's analysis involved partitioning the cumulative change in operating costs during the 1980-1988 period into several distinct components or sources. The cumulative change in expenditures is defined as the difference between the sum of annual expenditures reported during the period and a theoretical value reflecting what the sum of expenditures would have been had they remained constant at the level reported in 1980.

Measurement of the contribution of individual variables (e.g. wage rate increases) to changes in operating expenditures has been accomplished by sequentially isolating the effect of each variable. The procedure involves fixing the values of the variable according

to circumstances existing in a base year (for most analyses contained in this study, 1980) and measuring what expenditures would have been had the value of the variable remained constant throughout the study period. The difference between the hypothetical expenditure (i.e. assuming no change in the factor) and actual expenditure yields an estimate of the variable's contribution to cost changes. Similarly, by fixing the values of other variables in a step-wise fashion, it is possible to isolate their discrete contribution to cost changes.

For purposes of the study, the research team was granted full access to WCB data, reports and staff. Much of the study's analysis is based on data requested by the research team and supplied by the WCB of Manitoba in the form of custom, computer-generated, statistical tabulations. For the most part, these data related to the 1984 to 1988 period. Additional statistical information contained in annual reports and a wide variety of WCB administrative reports were also made available to and employed in the study.

Not all of the variables with potential to influence costs can be measured directly using empirical methods (e.g. worker and employer attitudes and case monitoring practices). Moreover, data constraints (related to the absence of a computer data base before 1985) restrict the time frame for empirical analysis to the 1985-1988 segment of the study period for several cost components. In light of these constraints, statistical analyses were augmented by a series of interviews (eleven in total) with senior WCB staff and managers. These interviews probed for opinions and perceptions concerning the role and contribution of various factors and events to Board operating costs, especially during the 1980-1984 period for which statistical data were scarce.

Most of the analyses carried out for this study were structured to differentiate between costs related to claims associated with collective liability employers (referred to as Class "E" or shared risk pool claims) and self insured employers. Although the relative share of expenditures accounted for by Class "E" and self-assurer claims changed during the period, the analyses did not reveal significant differences in the role of individual factors affecting costs between the two main employer classes. As such, the findings presented in this report relate to the total claim pool (i.e. Class "E" and self insured employers), unless otherwise noted.

C. STRUCTURE OF THE REPORT

The report is organized into eight (8) sections. Chapter II, which follows, provides a summary of the main findings and presents the study's conclusions. Chapter III provides a brief overview of expenditure trends among the five components of WCB operating costs during the 1980-1988 period. Chapter IV examines factors with the potential to affect temporary time loss compensation costs and presents the results of analysis aimed at isolating the contribution of individual variables to increases in this component of WCB costs. Factors contributing to increases in medical aid expenditures

are introduced and analyzed in Chapter V. The results of analysis of permanent disability and survivor pension expenditures are contained in Chapter VI. Chapters VII and VIII describe the results of analyses of vocational rehabilitation and administration expenditures, respectively.

II

SUMMARY, CONCLUSIONS AND MAJOR FINDINGS

A. SUMMARY

Analyses presented in the report have attempted to identify the broad range of factors which contributed to increases in annual operating costs of the WCB of Manitoba during the 1980-1988 period. Although data constraints did not permit measurement of the contribution to cost increases of several factors for the 1980-1984 period, direct measurement of the cost impact of most factors was possible for the 1985-1988 segment of the study period. This section of the report presents the major findings of the analysis and the study's conclusions.

The study's findings reveal that dramatic increases in WCB costs started during the severe recession of the early 1980's and continued at reduced levels, throughout the remainder of the study period. Cost increases were most pronounced during the early portion of the study period (i.e. 1980 - 1984).

Factors largely external to the Board (e.g. inflation) played the most important role in increasing costs during the 1980-1988 period. Across all components of the WCB system, external factors accounted for an estimated 55 to 60 percent (or approximately $210 million) of the cumulative increase in annual operating expenses. Inflation constituted the most important external cost factor. The remaining 40 to 45 percent (or $175 million) of the cost increase could not be attributed to external factors and appears to have occurred as a result of several changes in the Board's policies and operating practices. The cumulative increase in costs which occurred as a result of changes in Board policies and operating practices was distributed over components as follows:

Temporary time loss compensation	$ 77 million
Vocational rehabilitation	$ 44 million
Pension and survivor benefits	$ 29 million
Administration	$ 24 million
Medical aid	$ 1 million

With respect to temporary time loss compensation, more than one-half of the increase in costs was caused by lengthening of benefit periods. Detailed analysis of this factor revealed two trends, including:

a) a general lengthening of the majority of claims, which contributed about $28 million to the cumulative increase in costs, and

b) the emergence of larger numbers of extremely long term claims, which contributed about $49 million to the cumulative increase in costs.

A variety of changes to internal policies and claim management practices implemented during the 1982-1985 period accounted for the majority of cost increases associated with the first trend (i.e. the lengthening of claims generally). External factors related to the behaviour of medical practitioners and the type and severity of injuries also contributed to longer benefit periods but played a more minor role than internal factors.

Although inconclusive, evidence compiled in the study suggests that the second trend (i.e. larger numbers of extremely long term claims) occurred in response to Board policies which expanded claimant eligibility to vocational rehabilitation services. During the period, increasing numbers of claimants appear to have been held on temporary time loss benefits while awaiting access to vocational rehabilitation services.

Factors largely external to the Board were responsible for most of the increases reported in medical aid costs. Inflation and increases in the number of types of services provided by medical practitioners represented the most important factors affecting this component of WCB costs during the study period.

Much of the dramatic increase in vocational rehabilitation costs was attributable to increased case loads following the 1982 Board policy which expanded the role and range of services provided by vocational rehabilitation. Subsequent Board policy changes concerning benefit augmentation (i.e. the awarding of more generous special additional compensation (SAC)) served to accelerate increases in vocational rehabilitation costs during the 1985-1987 portion of the study period.

Increasing claim volumes, biennial indexing of benefits and the conversion of special additional compensation claims to permanent disability pensions represented the most important factors contributing to pension cost increases. Board policy changes increasing both the likelihood of awarding pensions and award levels also played a major role in pension cost increases during the period.

Several factors, including inflation, expansion of staffing and the physical plant and modernization of information and data management systems represented the most significant factors contributing to increases in the Board's administration costs.

Study findings also highlight the inter-related nature of factors affecting WCB cost increases. For example, medical practitioner decisions leading to the more frequent and widespread use of chiropractic and physiotherapy services not only contributed to increased medial aid costs but also to increased time loss compensation costs as a result of lengthening benefit periods. Similarly, Board policy changes concerning the awarding of special additional compensation led not only to initial (1985-1987) increases in vocational

rehabilitation costs but also to more dramatic increases in pension costs during the 1987-1988 period.

B. CONCLUSIONS

In general, the findings of this study are quite similar to those which have emerged from recent analyses of WCB costs in other provinces (e.g. Report of the Task Force on the Worker's Compensation Board: Alberta). The similarity of cost trends in Manitoba with those of other provinces strongly suggests that many of the internal changes which have increased costs during the study period were systemic to the workers compensation system. Although quite numerous, most of these changes appear rooted in a more liberal philosophy toward worker benefits and acceptance by the Board of much greater responsibility for the rehabilitation of injured workers. Evidence compiled for this study suggests that many policy changes were implemented without adequate planning, formal consideration of eventual cost impacts or systems for monitoring and managing costs.

Although the underlying concepts of compensation benefits in Manitoba remained largely unchanged during the study period, several other provinces responded to escalating costs by introducing new benefit provisions.

The main change which has occurred elsewhere in Canada involves the movement away from time loss payments based on 75 percent of gross earnings and the awarding of permanent disability pensions, toward an approach based on 90 percent of the individual's net wage loss and the use of lump sum awards for workers incurring permanent impairment. It would appear that if these provisions had been implemented in Manitoba a significant portion of the increases arising from the factors identified in this study would have been offset.

Consideration, by Manitoba, of the measures introduced in other provinces appears to be warranted on the following grounds:

1. Given current federal and provincial taxation levels, WCB benefits based on 75 percent of gross earnings provides net disposable income in excess of pre-accident levels among many workers. In such cases, WCB benefits could serve as a disincentive to return to work,

2. Present pensions for disability and fatalities provide, in certain instances, benefits beyond the level required to replace lost net income and beyond that intended to compensate for loss of employment for life. For example, the work-related death of a 64 year old person, one year before a pre-announced retirement, provides the spouse with income for the spouse's life, rather than income protection to the retirement date of the worker,

3. Present compensation and pension benefits are not integrated with other private or public sector disability benefits and income replacement plans (e.g. U.I.C., C.P.P, company pensions). This situation creates the

possibility whereby injured workers can be compensated at a net level well beyond their net pre-accident earning level.

C. MAJOR FINDINGS

EXPENDITURE TRENDS: 1980-1988

- Annual expenditures of the Workers Compensation Board of Manitoba increased at a rate substantially (about 5.8 percent) higher than inflation during the 1980-1988 period. Although significant increases in expenditures were reported throughout the study period, rates of increase were most dramatic early in the period. Cost increases during the first half of the period were about 8 percent higher than the rate of inflation.

- With the exception of 1985 medical aid costs, expenditure increases exceeding the rate of inflation were reported in every year of the study period for each of the five cost components considered in this study: temporary time loss benefits, medical aid benefits, permanent disability pensions, vocational rehabilitation services and administration.

- Across all components, costs increased from about $31 million in 1980 to $119 million in 1988, a cumulative expenditure increase of about $387 million during the study period. Temporary time loss compensation accounted for the largest share of the increase (37 percent), followed by permanent disability pensions (21 percent), administration (17 percent), vocational rehabilitation (15 percent) and medical aid (10 percent). This pattern of cost increases among components was similar to the distribution of expenditures in 1988.

TEMPORARY TIME LOSS COMPENSATION EXPENDITURES

- Expenditures for temporary time loss compensation rose from $14.4 million in 1980 to $47.7 million in 1988, an increase of roughly 231 percent during the study period.

Duration of Claims

- Increases in the length or duration of claims represented the most significant factor affecting increases in temporary time loss compensation expenditures. This factor accounted for 54 percent of the cumulative increase in expenditures during the study period.

- Claim duration data revealed both a general trend toward longer claims as well as a trend toward much larger numbers of extremely long terms claims.

- A large number of changes in Board policy and operating practices, as well as legislative changes appeared to be largely responsible for the general trend toward longer claims by affecting the context of adjudication and claims management.

  - Legislative changes in 1982 permitting worker access to WCB file information and medical reports affected information quality concerning worker health status and increased the administrative workload of adjudicators, potentially delaying decisions.

  - Dissolution of the claims review process in 1982 transferred greater responsibility for management of difficult claims to junior adjudicators and further increased the administrative workloads of adjudicators.

  - Perceived inconsistencies by adjudicative staff between stated Board policy and some decisions rendered by the Board's appeal bodies affected adjudicator behaviour by creating greater uncertainty with respect to the policy basis for claim termination.

  - The 1985 Board decision of abandon unsolicited medical reporting is believed by WCB staff to have increased compensation costs indirectly by reducing the amount of medical information available for adjudicative decisions, creating delays in obtaining medical data and increasing the administrative burden of adjudicators.

  - According to WCB staff, rapid expansion of the adjudicator complement during the 1982-1985 period reduced the quality of claim management (due to inexperience) and resulted in longer claims.

  - High caseloads and low staffing levels (in comparison with other Canadian Boards) aggravated the problems related to policy change, notably in vocational rehabilitation. This led to poor control, insufficient planning, and the tendency by adjudicators to seek easy solutions (i.e. longer compensation periods, improper referrals to rehabilitation, etc.)

  - The lack of a solid management information system in support of performance, activity and financial monitoring contributed to loss of management control over costs.

- Much of the increase in the average length of temporary time loss claims was attributable to a relatively small number (less than 1000) of quite long term claims. Growth in the number of claims exceeding 100 days in duration accounted for about 64 percent of the increase in average claim duration and 36 percent of the total increase in temporary time loss expenditures.

  - The expansion of vocational rehabilitation services during the mid 1980's appears to have contributed to significant growth in the number of long term

temporary time loss claims as increasing numbers of claimants were held on temporary compensation while awaiting access to vocational rehabilitation.

- The substantial increases in Manitoba's unemployment rate during the 1981 to 1983 recession coincided with the jump in the length of temporary time loss claims, although the actual number of time loss claims declined. This situation suggests that employer re-hiring practices and reduced employment opportunities also contributed to lengthening of benefit periods and higher compensation costs.

- The availability and utilization of a wider range of medical diagnostic and treatment procedures and the trend for greater use of medical specialists are also believed by staff to have contributed to longer claim periods. In particular, data analysis verified that the number of medical treatments increased by 16% and, in particular, data confirmed the more frequent and extensive use of chiropractic and physiotherapy services. The effect of these external factors on compensation costs, however, could not be determined conclusively.

Inflation and Wage Increases

- Wage increases among claimants contributed to significant increases in temporary time loss compensation costs. This factor accounted for roughly 46 percent of the cumulative increase in costs experienced during the study period.

- The average wage levels of injured workers increased at roughly the same rate as adjustments to the maximum and minimum insurable wages. Present indexing methods did not accelerate the effect of wage increases on compensation cost increases during the study period by a measurable amount.

Claim Volume

- During the study period, the volume of active temporary time loss claims remained relatively unchanged. This factor accounted for less than 1 percent of the cumulative increase in compensation expenditures during the 1980-1988 period.

- The likelihood of the Board awarding time loss benefits to an injured worker did not change significantly during the study period and did not contribute to increases in claim volume or compensation costs.

Injury, Gender and Industry Group Effects

- During the study period many structural changes occurred to the Manitoba economy. These changes altered the industrial and gender mix of claimants and the type of injuries compensated, but did not account for a significant portion of the increase in costs.

MEDICAL AID EXPENDITURES

- Medical aid expenditures rose from approximately $4.9 million in 1980 to $14.2 million in 1988, an increase of roughly 190 percent during the study period.

- The most rapid increases in medical aid costs were recorded during the first half of the study period. Rates of increase during the latter half of the period were considerably lower, but with the exception of 1985, remained above the inflation rate.

Claim Volume

- During the first half of the period, the number of claims receiving medical aid declined by roughly 11 percent (5,300 claims). Since 1984, however, the number of medical aid claims has increased sharply and played a major role in increasing in medical aid expenditures. This factor accounted for roughly 55 percent (or $2.9 million) of the $5.5 million cumulative increase in medical aid costs reported during the latter half of the study period.

Frequency of Billing

- Data on medical billing practices were not available to the study for the early portion of the study period. Since 1984, however, the number of services billed per patient increased steadily from roughly 2.4 billings per claimant to 2.7 billings per claimant. During this period, the provision of additional services per claimant accounted for approximately 16 percent (or $0.9 million) of the cumulative increase in medical aid expenditures.

    - More frequent use of chiropractic and physiotherapy services accounted for much of the increase in average number of services billed per claimant. Although this reflects shifts in the mix of injuries incurred (i.e. more back injuries), it also reflects the increased duration of claims and, in fact, may have contributed to longer claim durations.

Inflation and Fee Increases

- Increases in medical fees accounted for the majority of increased medical aid expenditures during the early portion of the study period. During the latter half of the period, however, the average cost per medical service increased moderately from $52 to $57 and after adjustment for inflation, declined. Increases in service billing rates accounted for only 13 percent (or $0.7 million) of the increase in total medical expenditures during the latter half of the study period.

Changes in Injury Types

- Shifts in the mix or type of injuries treated also occurred during the study period and contributed to increased medical aid costs. During the latter half of the period

this factor accounted for about 7 percent (or $0.4 million) of the total increase in medical aid costs. The contribution of this factor during the early portion of the period remains unknown.

Mix of Services Provided

- Changes in the types of medical services provided were also unavailable for the early portion of the study period. During the latter half of the period this factor played a minor role in medical cost increases and accounted for only 6 percent (or $0.3 million) of the cumulative increase in medical aid costs. Increased use of chiropractic and physiotherapy services were also primarily responsible for these cost increases.

PERMANENT DISABILITY AND SURVIVOR PENSION EXPENDITURES

- Expenditures for permanent disability and survivor pension benefits increased from $7.8 million in 1980 to more than $27.1 million in 1988, an increase of 247 percent.

Claim Volume

- Pension expenditures grew most rapidly during the early 1980's in response to increases in the number of pensions awarded. This factor accounted for the majority of expenditure increases until 1985.

  - The 26 percent increase in the number of pensions awarded during the 1982-1985 period could not be accounted for by changes in the number or severity of accidents reported. Board policy changes appear to be largely responsible for volume increases during this period.

  - In addition, the practice of awarding nominal permanent disability pension awards to permit benefit augmentation through special additional compensation (SAC) played a major role in the increase of pension claimants during this period.

- Substantial increases in pension expenditures were also reported during latter half of the study period. These increases occurred in the absence of significant changes in the number of pension claimants. According to WCB staff interviewed, the conversion of temporary SAC claimants to permanent pensions (i.e. SAC capitalization) represented the most important factor affecting costs during this period. It was not possible, however, to measure the contribution of SAC conversions to increased pension costs.

Inflation and Wage Increases

- Although data concerning the average pre-accident wage levels of pension recipients were not available for the early portion of the study period, increases in pre-accident wages during the latter half of the period averaged about 4 percent annually, well below the rate of inflation. This factor accounted for only a small portion (about 15 percent) of pension expenditure increases reported for this segment of the study period.

- Biennial indexing of pension benefits played a major role in pension cost increases throughout the study period. Although data available to the study did not permit exact calculation of the effect of indexing, evidence suggests that this factor accounted for roughly 25 to 35 percent of the cumulative increase in pension expenditures reported during the period.

Severity of Impairment

- Substantial declines in the average impairment factor for new pension awards were reported during the 1980-1988 period but did not serve to reduce pension cost increases.

  - Available data and WCB staff interviews suggest that although the number of very high impairment claims declined slightly during the period, the reduction in the average impairment rating occurred largely as a result of the more frequent awarding of nominal impairments to qualify injured workers for special additional compensation. As the majority of SAC claims have eventually been converted to permanent pensions, evidence suggests that the overall effect of lower impairment ratings on pension costs has been minimal. Increases in pension costs, however, were deferred for a short period of time (2 to 3 years) as result of SAC award practices.

Survivor Benefits

- Changes in the number of survivors of fatally injured workers who were receiving pension benefits did not contribute to increased pension costs. Although the number of spouses receiving support increased by six (6) percent during the 1980-1988 period, the number of other dependents (e.g. children) declined by 37 percent.

VOCATIONAL REHABILITATION EXPENDITURES

- Expenditures for vocational rehabilitation increased from roughly $.2 million in 1980 to slightly more than $13 million in 1988, an increase of about 6400 percent during the study period. Over the 1980-1988 period, the cumulative increase in rehabilitation expenditures totaled $59 million.

- Increases in vocational rehabilitation costs were particularly large during the early half of the study period, following implementation of new rehabilitation policies. During this period, the rate of expenditure increase averaged about 84 percent per year after adjustment for inflation. Substantially lower rates of increase (roughly 7 percent after inflation) were reported during the latter half of the period.

Claim Volume

- Substantial increases (quadrupling) in the number of rehabilitation clients occurred following the 1982 change in rehabilitation policy. This factor accounted for the vast majority of cost increases during the early half of the period. During the latter half of the period, continued increases in the number of clients accounted for 31 percent (or $2.2 million) of cumulative increase in rehabilitation costs.

Service Costs and Inflation

- Inflation related factors accounted for only a small portion of the increase in vocational rehabilitation expenditures during the early portion of the study period. Inflation, however, represented a major source of increased costs after 1985. This factor accounted for roughly 46 percent (or $3.2 million) of the cumulative increase in expenditures during the latter half of the study period.

Claim Management and Duration

- Lengthening of the rehabilitation process and the use of a more extensive range of services accounted for about 24 percent (or $1.7 million) of the cumulative increase in rehabilitation costs during the latter half of the study period. The contribution of these factors to cost increases prior to 1985 remains unknown.

    - Much of the increase in costs resulting from changes in service mix and claim duration were attributable to more frequent and generous special additional compensation (SAC) awards. These additional costs were incurred in direct response to changes in Board policy concerning benefit augmentation (1985).

Operating Practices and Policies

- According to WCB staff interviewed, several additional factors are believed to have resulted in increased rehabilitation costs during the study period. These factors, which relate to changes in the operating practices or policies of the Board, are summarized below.

    - The general isolation of the vocational rehabilitation department from other functional units of the Board resulted in fragmentation of case management functions, problems with respect to the timing of referrals and confusion concerning financial responsibility for claimant support. Accountability of vocational rehabilitation to the rest of the WCB system was believed to be

almost non-existent, as evidenced by the fact that the department did not prepare formal budgets until 1982 and operated without formal guidelines until 1985. The budget planning process during the 1982 to 1985 period was regarded as quite arbitrary and generally deficient.

- The 1982 Board policy requiring benefit levels for wage replacement and allowances for rehabilitation clients to be set according to the level for time loss benefits, as opposed to the ad hoc procedures employed prior to that time, had the effect of raising rehabilitation allowance benefits.

- The 1986 Board directive extending the authority of vocational rehabilitation counsellors to award up to 52 weeks of benefits without management approval and for the Director of Rehabilitation to award benefits beyond 52 weeks without consulting more senior management, contributed to increased costs by lengthening the period of rehabilitation benefits.

ADMINISTRATION EXPENDITURES

- Total administrative expenses grew from $4.4 million in 1980 to $18.8 million in 1988, an increase of 424 percent. During the 1980-1988 period, the cumulative increase in administration costs totaled $66 million and accounted for roughly 17 percent of the total increase in WCB operating costs.

- Among the four components of administrative costs considered in the study, staff salaries and benefits accounted for the largest portion of the increase (about 57 percent) followed by non-salary operating expenses (26 percent), responsibilities under the Workplace Safety and Health Act (13 percent) and the Worker Advisor program (4 percent).

Staffing and Salary Costs

- Inflation represented the most significant factor in staff salary and benefits increases. This factor accounted for about 64 percent of the cumulative increase in staffing costs.

- The number of WCB staff increased by 69 percent during the 1980-1988 period from 159 to 268. This factor accounted for about 27 percent of the cumulative increase in staffing costs.

  - Expansion of the vocational rehabilitation program represented the single most important factor in staff increases.

- Wage and benefit increases in excess of inflation played a more minor role in staffing cost increases. These factors jointly accounted for about 9 percent of the cumulative cost increase during the study period.

Non-Salary Operating Costs

- Inflation was identified as the most important factor influencing non-salary operating costs. This factor accounted for roughly 51 percent of the cumulative increase in non-salary expenditures during the period.

- The remaining increase in non-salary operating costs was attributable to several factors, including expansion of the WCB physical plant to house the vocational rehabilitation program and modernization of Board's information systems.

Workplace Safety and Health

- More than two-thirds of the cumulative increase in expenditures incurred as a result WCB responsibilities under the Workplace Safety and Health Act were accounted for inflation. Several additional factors related to the transfer of additional responsibilities to the Board (e.g. mine inspectors) accounted for the remainder of the increase in this component of administration costs.

Worker Advisor Program

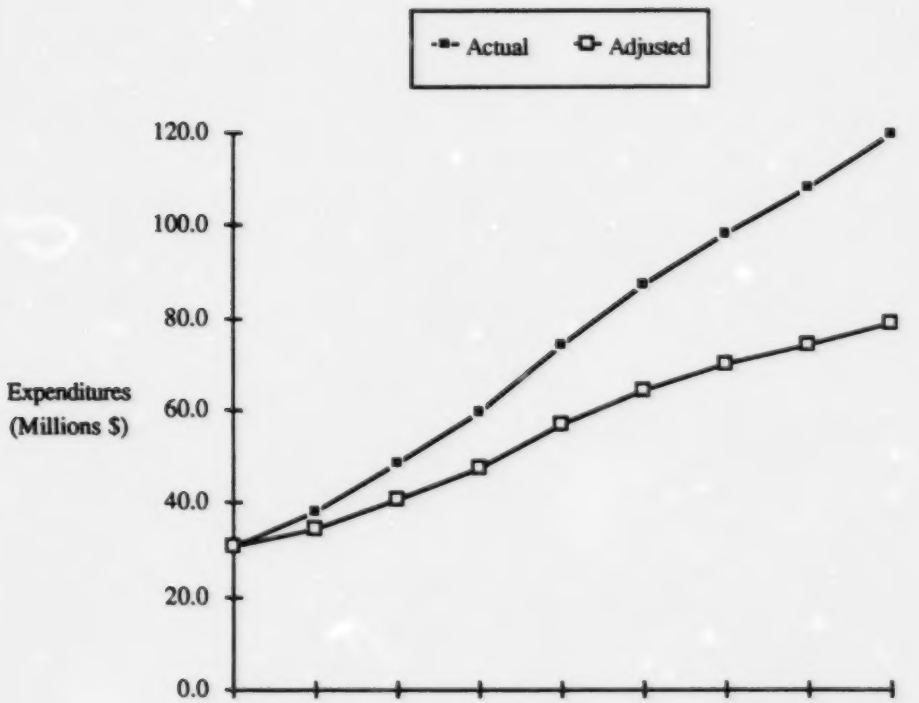
- Virtually all of the increase in expenditures related to the Worker Advisor program were accounted for by inflation. Expenditures for this component, after adjustment for inflation, declined by 35 percent during the study period.

III

AN OVERVIEW OF EXPENDITURE TRENDS DURING THE 1980-1988 PERIOD

1. Total annual expenditures of the Workers Compensation Board of Manitoba increased at a rate substantially higher than inflation each year during the 1980-1988 period.

Exhibit III-1
Total annual expenditures
WCB of Manitoba, 1980 - 1988 (Actual and adjusted for inflation)



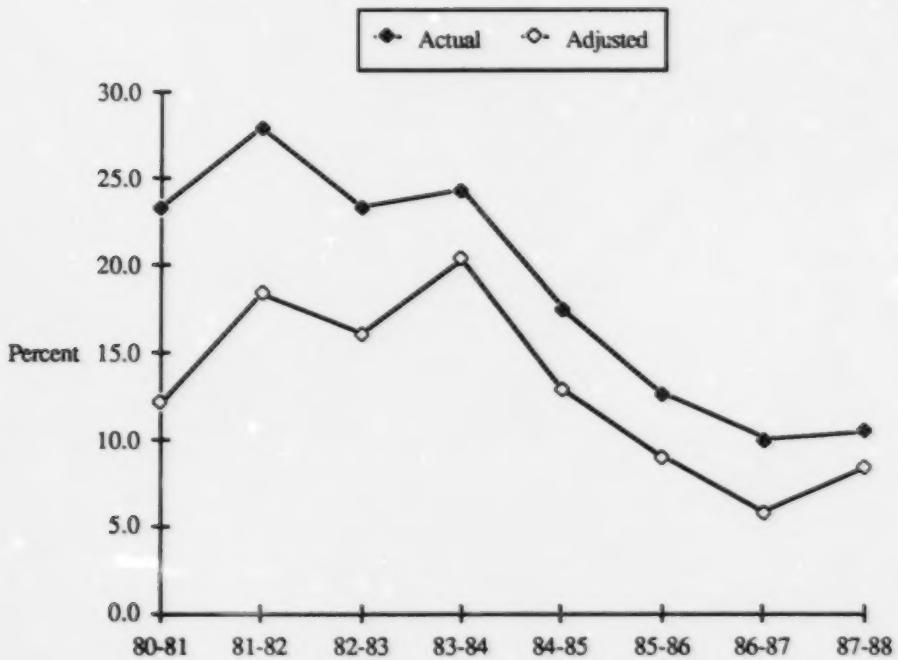
	1980	1981	1982	1983	1984	1985	1986	1987	1988
Actual	30.7	37.9	48.4	59.7	74.2	87.2	98.2	108.0	119.4
Adjusted	30.7	34.4	40.8	47.3	57.0	64.0	69.7	73.8	78.5

Source: Annual Reports and custom tabulations prepared by WCB of Manitoba for PMS&K

Between 1980 and 1988, total annual expenditures of the Workers Compensation Board of Manitoba nearly quadrupled from roughly $31 million to more than $119 million. Expenditures after adjustment for inflation (as measured by the Consumers Price Index), were $78.5 million in 1988, roughly 2.6 times higher than those reported in 1980 (See Exhibit III-1).

2. Although significant increases in expenditures were reported throughout the study period, rates of increase were most dramatic during the 1980-1984 period

Exhibit III-2
Annual change in total expenditures
WCB of Manitoba, 1980 - 1988 (Actual and adjusted for inflation)



	80-81	81-82	82-83	83-84	84-85	85-86	86-87	87-88
Actual	23.3	27.9	23.3	24.3	17.5	12.6	10.0	10.5
Adjusted	12.1	18.4	16.1	20.3	12.9	9.0	5.8	8.4

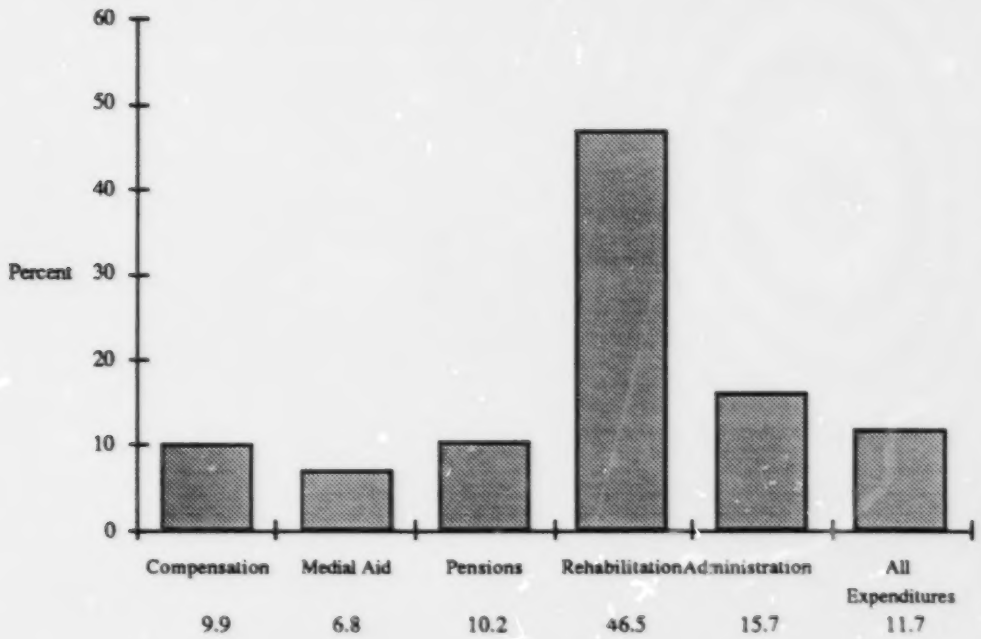
Source: Annual Reports and custom tabulations prepared by WCB of Manitoba for PMS&K

During the 1980-1984 period, unadjusted expenditures rose by more than 23 percent per year. After adjustment for inflation, annual rates of increase during this period ranged from 12 to 20 percent. Although expenditures increased at a slower rate

during the latter half of the study period (1984-1988), annual increases continued to exceed the rate of inflation by a substantial (about four percent) margin (See Exhibit III-2).

3. Expenditure increases exceeding the rate of inflation were reported for each of the five cost components considered in this study

Exhibit III-3
Average annual increase in expenditures by component
WCB of Manitoba, 1980 - 1988 (Adjusted for inflation)

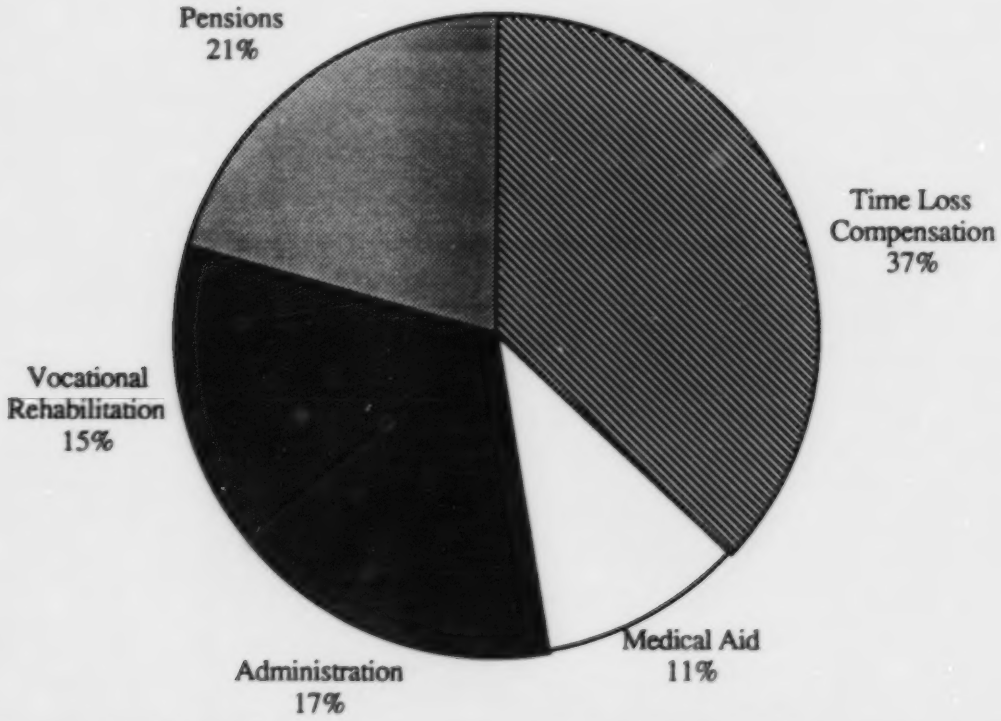


Source: Annual Reports and custom tabulations prepared by WCB of Manitoba for PMS&K

All five cost components (i.e. temporary time loss compensation, medical aid, pensions, vocational rehabilitation and administration) experienced rates of expenditure increase well in excess of the rate of inflation. Increases were especially large for vocational rehabilitation expenditures which rose at an average annual rate of nearly 47 percent after adjustment for inflation. With the exception of vocational rehabilitation, administration expenditures rose more quickly than program benefit expenditures. After inflation increases in administration expenditures averaged 15.7 percent annually during the 1980-1988 period. By way of comparison, annual expenditures (after inflation) for pension benefits, temporary time loss compensation and medical aid benefits averaged 10.2, 9.9 and 6.8 percent, respectively.

4. **The cumulative increase in expenditures across all cost components totaled roughly $387 million for the study period. All cost components accounted for a significant share of increased expenditures**

Exhibit III-4
Share of expenditure increase by component
WCB of Manitoba, 1980 - 1988



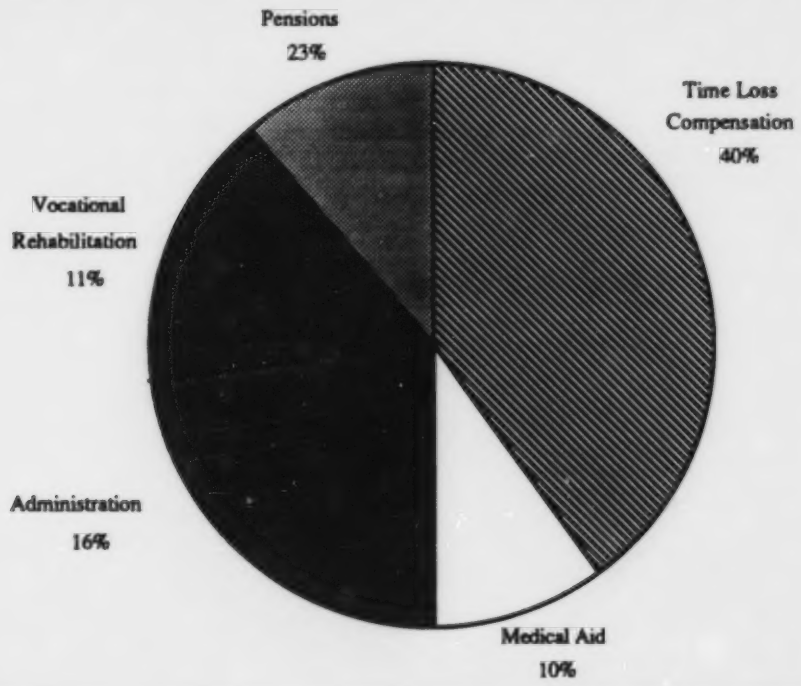
Source: Annual Reports and custom tabulations prepared by WCB of Manitoba for PMS&K

In this study, the cumulative expenditure increase is defined as the difference between the total actual expenditures for the period and a hypothetical value reflecting what total expenditures would have been had they remained constant at the level of the base year (i.e. 1980). Temporary time loss compensation benefits accounted for the largest portion (about 37 percent or $143 million) of the cumulative increase in expenditures reported during the 1980-1988 period. Approximately 21 percent (or $79 million) of the increase related to permanent disability and survivor pension benefits. Administration, vocational rehabilitation and medical aid expenditures accounted for

roughly 17 percent ($66 million), 15 percent ($58 million) and 10 percent ($42 million) of the total cumulative expenditure increase,respectively (See Exhibit III-4).

The distribution of expenditure increases among cost components was generally similar to the distribution of expenditures reported in 1988 (see Exhibit III-5).

EXHIBIT III-5
Distribution of expenditures by component, WCB of Manitoba, 1988



Source: Annual Reports and custom tabulations prepared by WCB of Manitoba for PMS&K

IV

TEMPORARY TIME LOSS COMPENSATION EXPENDITURES

Temporary time loss compensation benefits form the largest component of WCB expenditures (roughly 40 percent in 1988). These benefits are awarded to qualifying workers to compensate for temporary wage losses incurred as a result of an injury in the work place. Qualifying injured workers are eligible for a benefit payment based on 75 percent of pre-injury wages subject to a maximum. The maximum benefit is adjusted when necessary on an annual basis to reflect any changes in worker wage levels such that the incomes of 90 percent of claimants are fully insured.

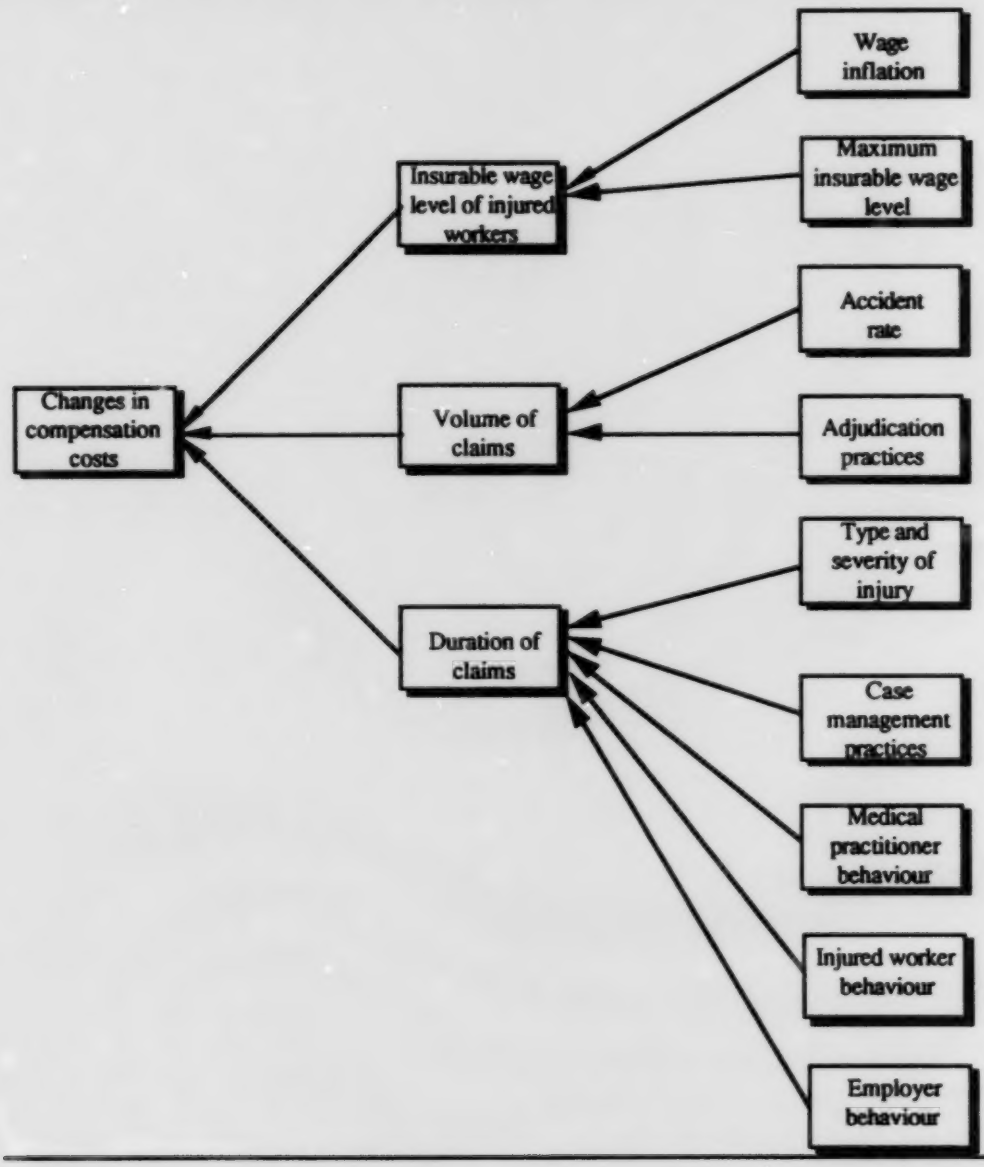
Benefit levels for time loss compensation are not adjusted to reflect other means of financial assistance received by the injured worker (e.g. private insurance, C.P.P benefits, U.I.C. entitlements). In addition, WCB benefits are not subject to income taxation. This situation can give rise to instances where the disposable income of WCB claimants is greater than earnings after deductions prior to their injury.

Annual temporary time loss compensation expenditures are determined by three main factors: the insurable wage level of injured workers, the number of claimants compensated and the length or duration of time for which claimants receive benefits

Conceptually, time loss compensation expenditures are determined directly by three variables, the average insurable wage level of injured workers, the number of claimants and the length of time for which claimants receive benefits. Each of these factors are, in turn, influenced by a number of secondary factors. These secondary factors are identified in Exhibit IV-1.

The effect of changes in the wage levels of injured workers contributes to cost increases directly as benefit entitlements are set as a percentage of pre-injury wages. As worker wages in general, increase in response to inflation and other economic circumstances, the wage levels of injured workers may also be expected to increase and result in larger entitlements. Annual adjustments to the maximum and minimum insurable wage level to reflect increased wage levels may also be expected to lead to higher benefit entitlements.

Exhibit IV-1
WCB of Manitoba
Elements of compensation cost component



Temporary time loss compensation expenditures are also influenced directly by the number of claims. This factor, in turn, is determined to a large extent by accident reporting rates, the nature and severity of injuries incurred and recognized and the practices of the Board with respect to adjudication (approval or rejection) of claims. Claim volumes may

also be influenced directly by the board's appeal system (a tertiary factor not shown on the chart).

The length or duration of time for which benefits are paid obviously affects compensation costs directly. This factor is, in turn, influenced by a large number of variables including the type and severity of injury, the monitoring and management practices of the Board with respect to active claims, and the behaviour of several parties external to the Board, including medical practitioners (e.g. treatment duration and reporting practices, especially return to work dates), employers (e.g. re-hiring practices) and injured workers (e.g. desire and willingness to return to work).

Several of the secondary factors discussed above are themselves affected by broader social and economic processes which result in structural changes in the composition of the labour market and employed labour force or influence the behaviour of individuals (workers, medical practitioners, employers, legislators and board staff and management) involved in the workers compensation system.

For example, cyclical and structural changes in the economy result in both short and long term changes in the mix of industries and occupations which comprise the labour market. To the extent that wage levels and the incidence and type of accidents vary by industry and occupation, changes in the economy may be expected to influence the wage characteristics of injured workers, the number and severity of time loss injuries, the ability of employers to re-hire injured workers and the employment opportunities available to injured workers.

The general societal trend toward the increasing participation of females in paid employment also has the potential to influence compensation costs as result of gender based occupational segmentation and wage rate differentials.

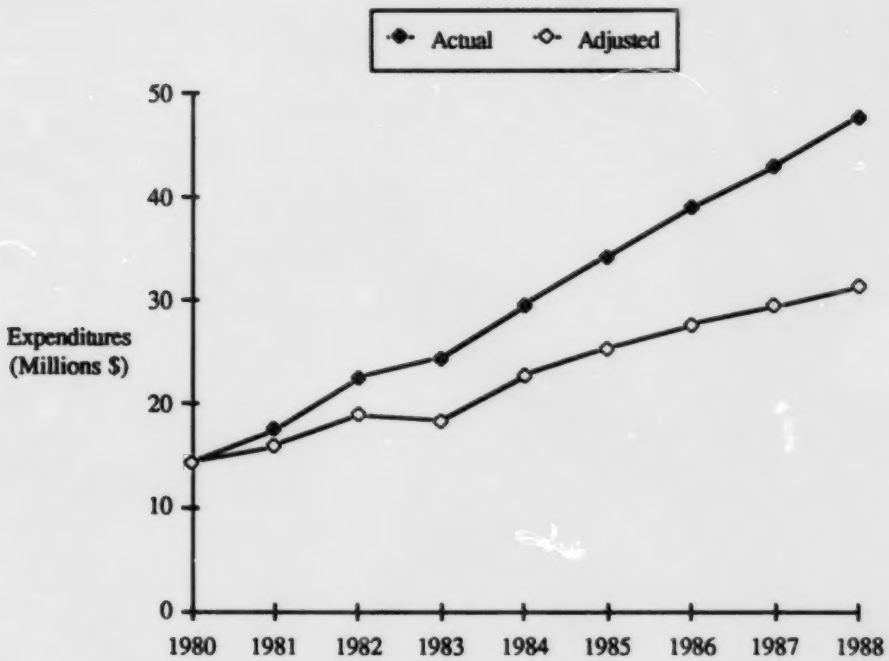
The behaviour of medical practitioners may be expected to be influenced by changes in diagnostic and treatment opportunities and by legislative and board policy changes (e.g. reporting requirements). Legislation and board policy also affects eligibility for benefits (e.g. the definition of what constitutes an compensable injury), adjudication (e.g. the type and amount of documentation required to reach a decision concerning individual claims), case management (e.g. procedures and operating rules for continuing or terminating benefits), appeal practices and the rights of employers and workers to information pertaining to claims.

For many of the factors identified above, the causal connection to changes in compensation costs can be neither proven definitively nor can their effect on costs be measured with precision. As such, our analysis of changes in temporary time loss compensation costs focuses primarily on the role of the main and secondary factors appearing in Exhibit IV-1. Where possible, the analysis has been extended to consider the role of additional factors. In many instances, statistical information was not available to support analysis of these additional factors and the study's findings are based on the results of interviews with senior WCB staff and management.

A. TRENDS IN TEMPORARY TIME LOSS COMPENSATION EXPENDITURES

Expenditures for temporary time loss compensation rose from $14.4 million in 1980 to $47.7 million in 1988, an increase of roughly 231 percent during the study period.

Exhibit IV-2
Time loss compensation expenditures
WCB of Manitoba, 1980 - 1988 (Actual and adjusted for inflation)



	1980	1981	1982	1983	1984	1985	1986	1987	1988
Actual	14.4	17.5	22.5	24.4	29.5	34.2	38.9	43	47.7
Adjusted	14.4	16	18.9	18.3	22.7	25.3	27.6	29.4	31.4

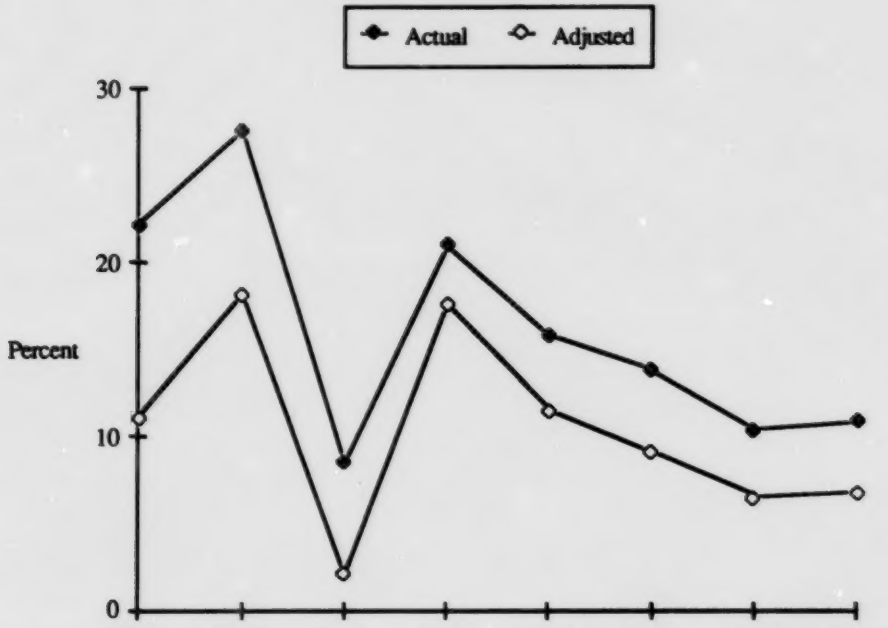
Source: Annual Reports and custom tabulations prepared by WCB of Manitoba for PMS&K

Expenditures for temporary time loss compensation benefits increased significantly throughout the 1980-1988 period and were roughly 3.3 times higher in 1988 than in 1980. Expenditure increases exceeded the rate of inflation every year during the study period. After adjustment for inflation, expenditures were roughly 118 percent higher in 1988 than in 1980. The cumulative increase in temporary time loss compensation

expenditures for the study period totaled more than $143 million, representing about 37 percent of the $387 million cumulative increase in WCB total operating expenditures.

Increases in temporary time loss compensation expenditures were most dramatic during the 1980-1984 period. Rates of increase since 1984 have tended to be sharply lower, but well above the rate of inflation.

Exhibit IV-3
Annual change in time loss compensation expenditures
WCB of Manitoba, 1980 - 1988 (actual and adjusted for inflation)



	80-81	81-82	82-83	83-84	84-85	85-86	86-87	87-88
Actual	22.2	27.6	8.5	21	15.8	13.8	10.4	10.9
Adjusted	11.1	18.1	2.1	17.6	11.5	9.1	6.5	6.8

Source: Annual Reports and custom tabulations prepared by WCB of Manitoba for PMS&K

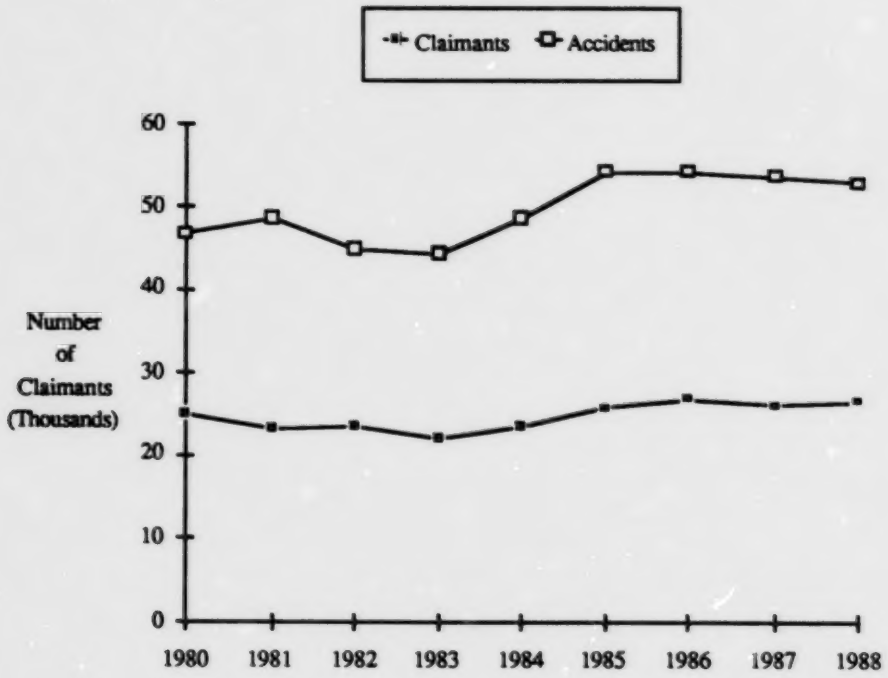
Exhibit IV-3 above presents unadjusted and adjusted (for inflation) annual changes in expenditures for temporary time loss compensation for the study period. With the exception of the 1982-1983 recessionary period, during which costs rose by only 8.5 percent, rates of increase in temporary time loss expenditures tended to be higher during the early half of the study period. Annual rates of increase during the 1980-1984 period averaged more than 11 percent after adjustment for inflation. The abrupt decline in the rate of expenditure increase in 1982-1983 was not fully investigated in this study. It should be

noted, however, that the decline coincided with a modest reduction in the number of accidents reported and in the number of active temporary time loss claims. Since 1984, rates of increase tended to moderate, averaging about 8.1 percent annually after adjustment for inflation.

B. EFFECT OF CHANGES IN CLAIM VOLUME

During the study period, the number of active temporary time loss claims remained largely unchanged. This factor was responsible for less than 1 percent of the cumulative increase in temporary time loss compensation expenditures.

Exhibit IV-4
Reported accidents and claimants receiving temporary time loss benefits
WCB of Manitoba, 1980 - 1988



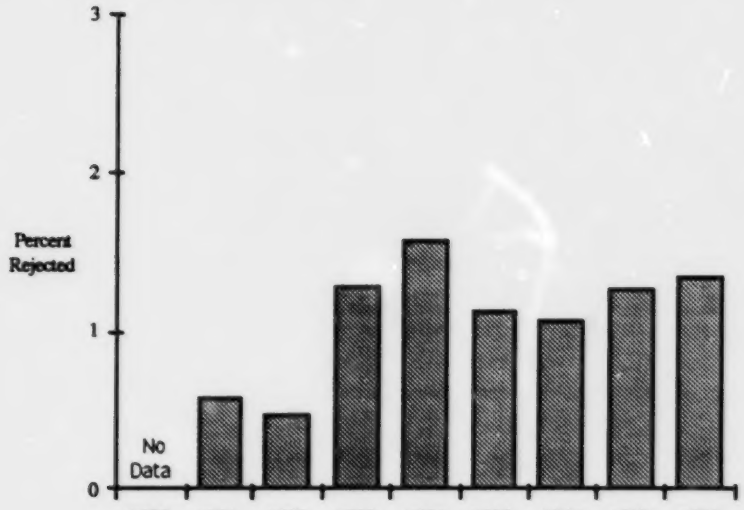
	1980	1981	1982	1983	1984	1985	1986	1987	1988
Claimants	24.8	23.1	23.4	22	23.6	25.6	26.8	25.9	26.5
Accidents	46.6	48.8	44.7	44.1	48.7	54.4	54.2	53.7	52.9

Source: Annual Reports and custom tabulations prepared by WCB of Manitoba for PMS&K

As Exhibit IV-4 indicates, the number of claimants receiving temporary time loss benefits did not vary dramatically during the 1980-1988 period. Claim volumes declined marginally during the 1980-1983 period in response to weakening of the provincial economy, but rebounded during the 1984-1985 period to a level slightly higher (about 8 percent) than that reported in 1980. Claim volumes since 1985 have been generally stable. The declines experienced during the 1980-1983 period were offset by subsequent increases such that the net contribution of volume changes to compensation costs was negligible. This factor accounted for less than one percent of the cumulative increase in temporary time loss compensation costs reported during the study period.

Exhibit IV-4 also reveals the close relationship between the number of reported accidents and temporary time loss claimants. The ratio of active temporary time loss claimants to reported accidents has remained almost constant throughout the study period. This situation suggests that the propensity or likelihood of the board to award time loss benefits did not change significantly during the study period and probably did not contribute to increased compensation costs. This finding is reinforced by data concerning initial claim rejection rates (See Exhibit IV-5) which suggest that rates have varied only marginally during the period and tended to be higher during years comprising the latter portion of the study period. Variations in rejection rates of the scale identified in Exhibit IV-5 (i.e. less than 1 percent) translate into changes of less than 250 claims.

Exhibit IV-5
Claims initially rejected as a proportion of all claims
WCB of Manitoba, 1980 - 1988



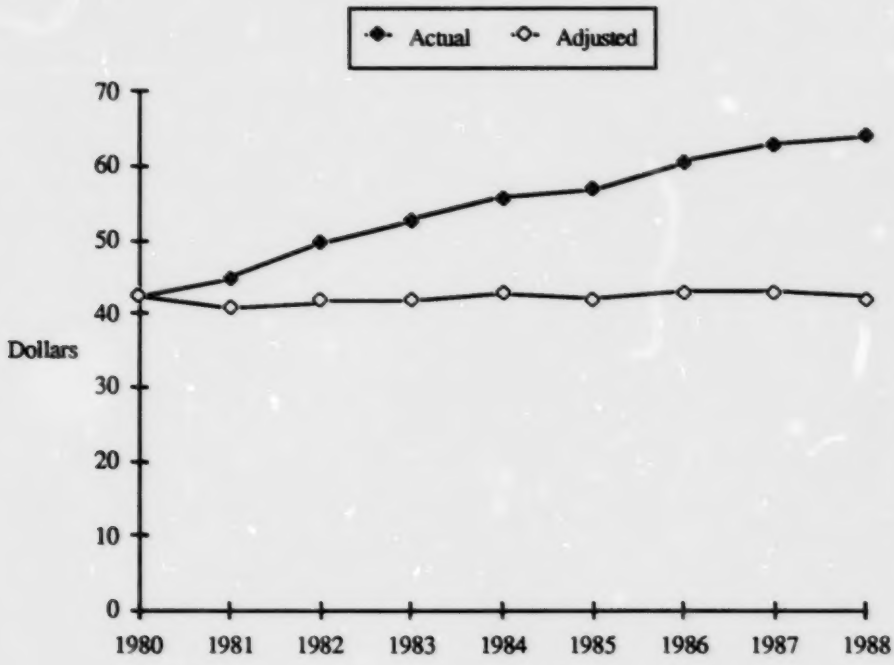
Percent		0.58	0.48	1.29	1.58	1.14	1.08	1.27	1.34

Source: Annual Reports and custom tabulations prepared by WCB of Manitoba for PMS&K

C. EFFECT OF CHANGES IN BENEFIT LEVELS

As expected, wage increases among claimants has contributed to significant increases in temporary time loss compensation costs. This factor accounts for roughly 46 percent of the cumulative increase in costs experienced during the study period.

Exhibit IV-6
Average daily compensation paid to temporary time loss claimants
WCB of Manitoba, 1980 - 1988



	1980	1981	1982	1983	1984	1985	1986	1987	1988
Actual	42.51	44.92	49.55	52.66	55.72	56.76	60.57	62.89	63.94
Adjusted	42.51	40.84	41.71	41.76	42.76	41.95	42.99	42.96	42.03

Source: Annual Reports and custom tabulations prepared by WCB of Manitoba for PMS&K

In this study, the contribution of wage increases to changes in temporary time loss compensation costs is measured using data on the average daily benefit paid per claimant. The indicator measures wage levels directly, as benefit entitlements are set as a percentage of pre-injury wages. As illustrated in Exhibit IV-6, the average daily benefit paid increased in a regular fashion throughout the study period. On an annual basis, the daily benefit

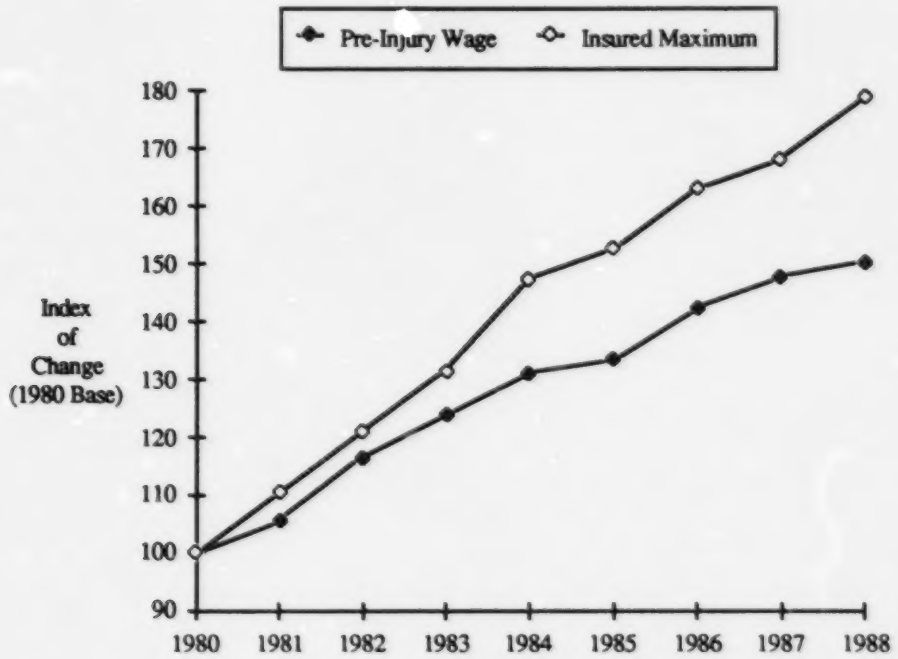
increased at the average rate of 5.1 percent and was roughly 50 percent higher in 1988 than in 1980.

The Exhibit also illustrates that after adjustment for inflation, the average daily benefit has remained almost unchanged. Throughout the study period, increases to the average daily benefit closely approximated increases in the rate of inflation.

The effect of annual adjustments to the maximum insurable wage on increases in benefit levels depends on the relationship between wage increases and increases to the maximum. Assuming no change in other factors, when increases to the maximum insurable wage exceed wage increases, the provision will tend to accelerate increases in compensation costs. During periods when wage increases exceed increases in the maximum, the provision has the effect of constraining increases in average benefit levels. As Exhibit IV-7 reveals, pre-injury wages increased at a slightly slower rate than increases in the maximum insurable wage. As such, indexing of the maximum has served to accelerate the effect of wage increases on compensation cost increases during the study period. The small degree of difference between increases in wages and the maximum, however, implies that the effect of this factor, in terms of accelerating cost increases, has been modest.

Wage increases and increases in the maximum insurable wage jointly accounted for 46 percent (or $66 million) of the cumulative increase in temporary time loss compensation expenditures reported during the period.

Exhibit IV-7
Index of change in pre-injury wages and maximum insurable earnings
WCB of Manitoba, 1980 - 1988



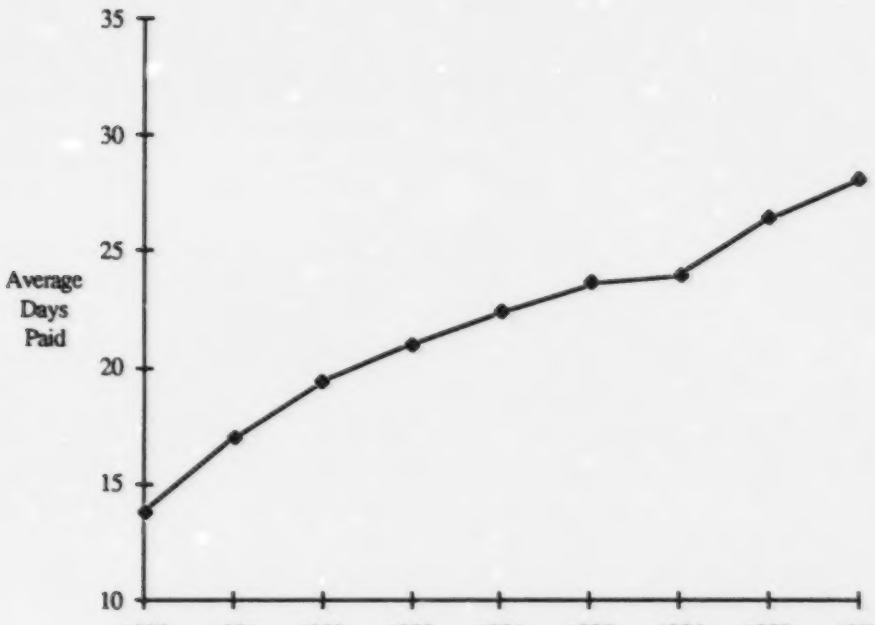
	1980	1981	1982	1983	1984	1985	1986	1987	1988
Pre-Injury Wage	100	105.7	116.6	123.9	131.1	133.5	142.5	147.9	150.4
Insured Maximum	100	110.5	121.1	131.6	147.4	152.6	163.2	168.4	178.9

Source: Annual Reports and custom tabulations prepared by WCB of Manitoba for PMS&K

D. EFFECT OF CHANGES IN CLAIM DURATION

Increases in the length or duration of claims represented the most significant factor affecting increases in temporary time loss compensation expenditures. This factor accounted for 54 percent of the cumulative increase in expenditures during the study period.

Exhibit IV-8
Average days of temporary time loss compensation paid per claimant
WCB of Manitoba, 1980 - 1988



	1980	1981	1982	1983	1984	1985	1986	1987	1988
Days Paid	13.8	17	19.4	21	22.4	23.6	24	26.4	28.1

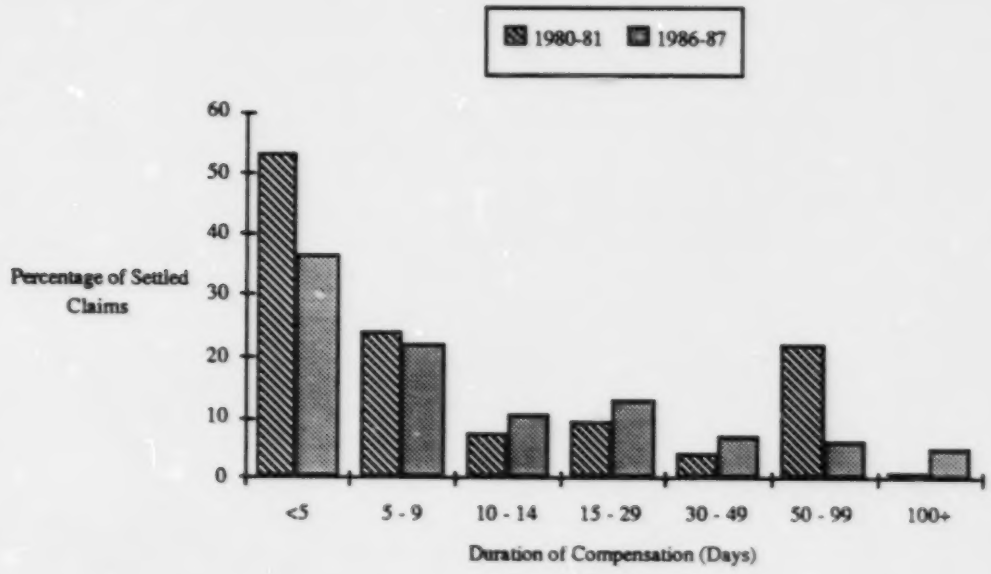
Source: Annual Reports and custom tabulations prepared by WCB of Manitoba for PMS&K

As illustrated in Exhibit IV-8, the average number of compensation days paid per claimant more than doubled during the study period (from roughly 13.8 days in 1980 to 28.1 days in 1988). Increases in the average number of days on compensation were experienced throughout the study period, but tended to be slightly larger during the 1980-1983 period. During this segment of the study period, lengthening of claims accounted for roughly 62 percent of the increase in compensation costs. Although some reduction in the rate of increase occurred during the 1984-1988 period, claim duration continued to represent the dominant factor affecting compensation expenditures increases. Over the course of the entire study period, claim duration accounted for roughly 54 percent (or $77 million) of the cumulative increase in temporary time loss compensation expenditures.

Much of the increase in the average length of temporary time loss claims is attributable to a relatively small number (less than 1000) of quite long term claims. Growth in the number of claims exceeding 100 days in duration accounted for about 64 percent of the increase in average claim

duration and 36 percent of the increase in temporary time loss expenditures.

Exhibit IV-9
Distribution of temporary time loss claims by duration of compensation
WCB of Manitoba, 1980/81 and 1986/87



1980-81	53.2	23.7	7.5	9.0	3.8	2.2	0.7
1986-87	36.6	22.2	10.6	12.6	7.1	6.0	5.0

Source: Annual Reports and custom tabulations prepared by WCB of Manitoba for PMS&K

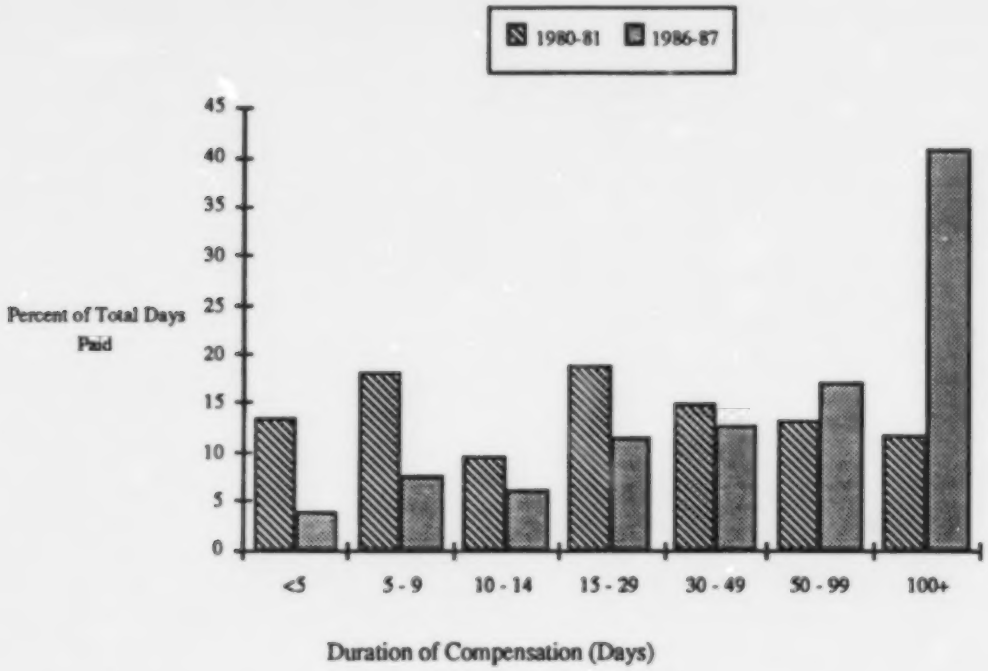
The distribution of claims by claim duration, which is presented in Exhibit IV-9, illustrates two main trends:

- A general shift toward longer benefit periods.
- Significant growth in the share of claims exceeding 100 days in duration.

In particular, the impact of growth in the number of long term claims on compensation costs has been quite significant. During the 1980-1981 period, claims exceeding 100 days in duration accounted for 0.7 percent of all claims and 11.9 percent of total number of compensation days paid. During 1986-1987, long term claims accounted for 5 percent of all claims and roughly 41 percent of all compensation days paid. The increasing volume of long term claims (about 970 claims) accounted for 36 percent of the total increase in compensation costs and 64 percent (roughly 9 days) of the increase in the

average length of claims. The remaining six days of the increase in claim length was associated with the general lengthening of the majority of claims.

Exhibit IV-10
Distribution of total compensation days paid by duration of compensation WCB of Manitoba, 1980/81 and 1986/87



1980-81	13.5	18.1	9.5	18.8	14.9	13.3	11.9
1986-87	4.1	7.5	6.0	11.5	12.8	17.2	40.8

Source: Annual Reports and custom tabulations prepared by WCB of Manitoba for PMS&K

The duration of claim data presented in Exhibits IV-9 and IV-10 suggest that at least two sets of factors have operated to increase benefit periods and subsequently compensation costs. The general trend toward longer benefit periods suggests that one or more systemic changes occurred during the study period which served to lengthen the benefit period of most claims. The second trend (i.e. growth in the number of long term claims), suggests the existence of additional changes related to the characteristics and management of a relatively small number of claims. Factors contributing to these two trends are discussed in the following section of the report.

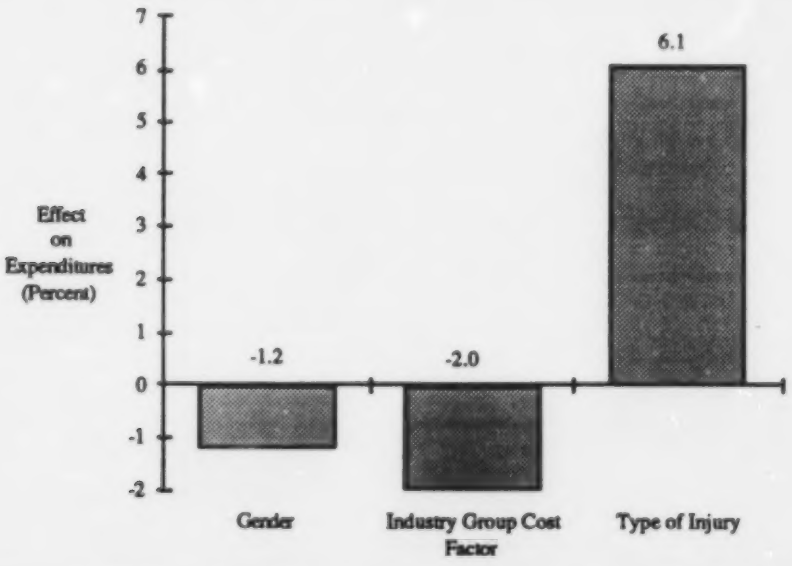
E. FACTORS AFFECTING CLAIM VOLUME, BENEFIT LEVELS AND CLAIM DURATION

As noted earlier in this section, several factors have the potential to affect temporary time loss compensation costs by influencing the number of claims, the size of benefit entitlements and/or the length of time for which benefits are paid. Many of these factors including the type and severity of injury incurred and the behaviour of medical practitioners, injured workers and employers are largely outside of the control of the Board. Responsibility for and control over several additional factors affecting claim duration rests with the Board, including claim monitoring, management and termination practices and appeal practices and procedures.

F. THE ROLE OF EXTERNAL FACTORS

During the study period many structural changes occurred to the Manitoba economy. These changes altered the industrial and gender mix of claimants and the type of injuries compensated, but did not contribute to significantly to costs.

Exhibit IV-11
Contribution of gender, industry group and injury type to temporary time loss expenditure increases, 1980 - 1988

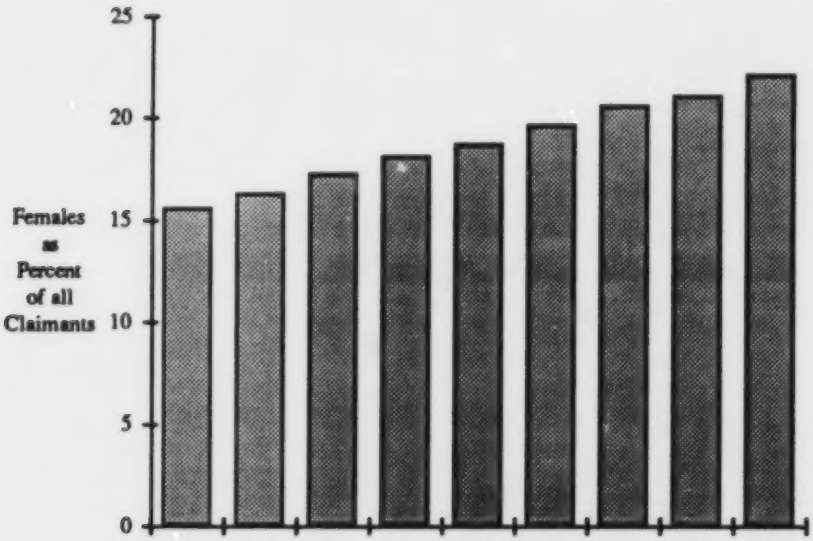


Source: Annual Reports and custom tabulations prepared by WCB of Manitoba for PMS&K

During the study period, the Manitoba economy, like other provincial economies, experienced quite pronounced structural changes. The recession of the early 1980's resulted not only in employment declines, but also redistribution of employment among industrial sectors. Subsequent strengthening of the economy during the latter portion of the study period fostered further employment redistribution as some industrial sectors recovered more quickly than others. As a result of these structural changes in the economy, the mix of temporary time loss claims among industry groups has also changed. Changes in the mix of claimants by industry group, however, did not result in significant changes in temporary time loss compensation costs during the study period. In fact, **had all other factors affecting costs remained constant, changes in the industrial mix of claimants would have resulted in a two (2) percent reduction in compensation expenditures.** The reduction was caused by small increases during the study period in the proportion of claimants from industrial groups characterized by lower average wage levels.

Quite large shifts in the gender mix of temporary time loss claimants also occurred during the study in response to the continuing trend toward greater participation of women in labour market.

Exhibit IV-12
Female share of temporary time loss compensation claimants, WCB of Manitoba, 1980 - 1988



	1980	1981	1982	1983	1984	1985	1986	1987	1988
Percent	15.6	16.4	17.3	18.1	18.8	19.7	20.6	21.1	22.1

Source: Annual Reports and custom Tabulations prepared by WCB of Manitoba for PMS&K

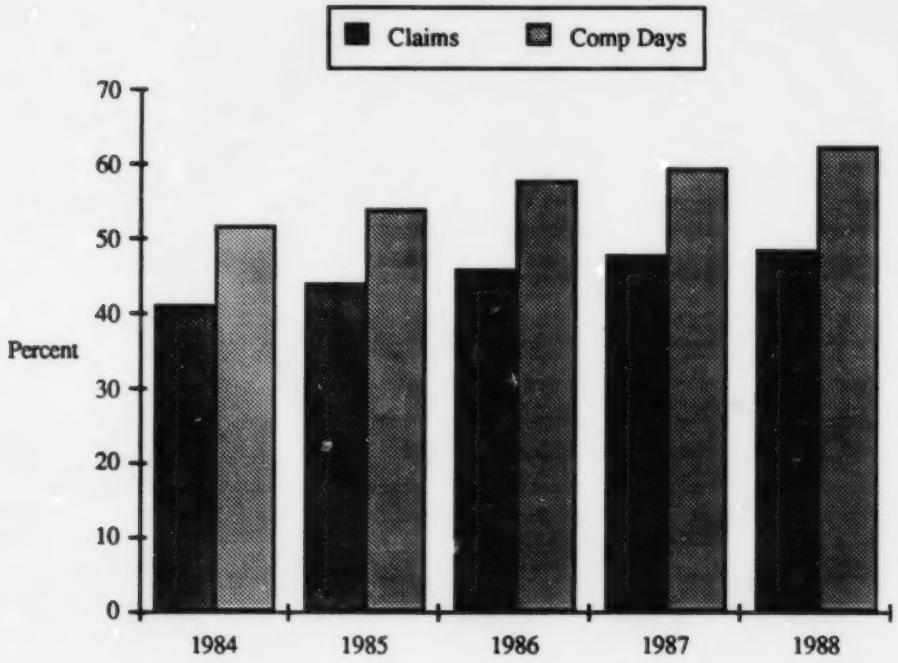
As illustrated in Exhibit IV-12, growth in the female share of temporary time loss claimants occurred steadily throughout the study period from roughly 15.6 percent of all claimants in 1980 to more than 22 percent in 1988. Given the well documented wage differentials among gender groups, the increasing concentration of females among the pool of claimants should have led to reduced compensation costs during the study period. The effect of lower average wage levels, however, was largely offset by longer claim duration among females. **Had all other factors affecting costs remained constant, changes in the gender mix of claimants would have resulted in a one (1) percent reduction in compensation costs.** The effect of gender changes on costs derived solely from the lower average wage levels (and subsequently lower benefit entitlements) of injured female workers.

Although gender changes played only a minor role in compensation expenditures increases during the study period, this factor may become more influential in the future. To the extent that current pay equity policy and legislation is successful in reducing gender based wage differentials, trends toward increasing numbers of female claimants may be expected to result in higher compensation expenses.

As noted earlier in the study, economic changes can also result in shifts in the type and severity of work place injuries. The mix of time loss injuries has also been affected during the study period by Board policies concerning eligibility (e.g. greater willingness to accept cardio-vascular and respiratory diseases) and by non-economic external events (e.g. progress in medical science) which have established more clear causal relationships between certain illnesses or injuries and the workplace (e.g. carpal tunnel syndrome). In addition, the injury mix of time loss claimants has been affected by improved diagnostic, classification and data reporting procedures. Although it was not possible to separate the effects of external factors, as opposed to Board policy or legislation, significant changes in the injury mix of time loss claimants were reported during the period.

The most significant changes involved increases in the incidence of four injury types among temporary time loss claimants. As illustrated in Exhibit IV-13, the share of claims with back, neck or multiple injuries or cardio/respiratory/industrial diseases rose from 41.3 of all temporary time loss claims in 1984 to 48.7 percent in 1988. In addition, these injury types tended to result in longer claim durations and experienced increasing claim durations during the study period, as illustrated in Exhibit IV-14.

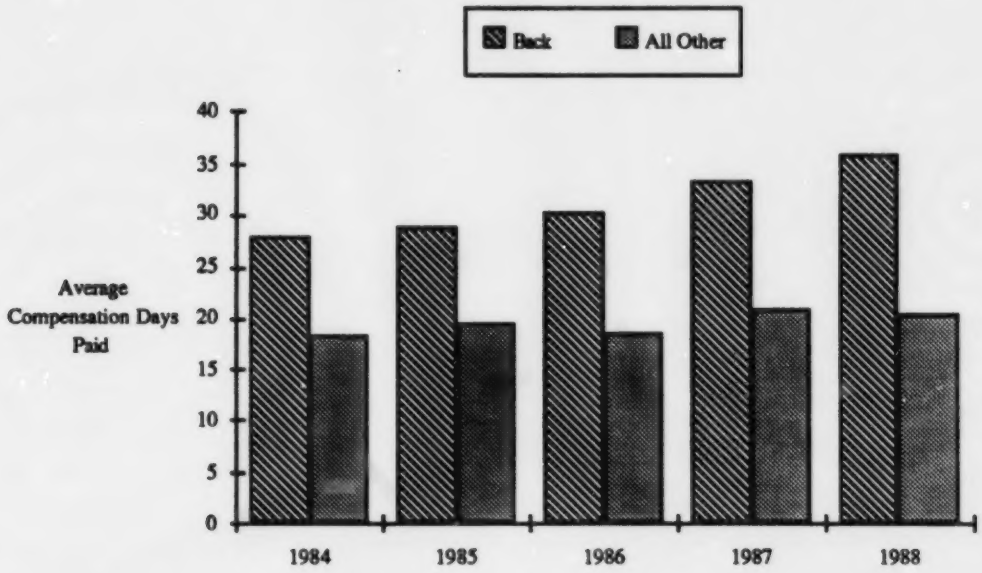
Exhibit IV-13
Claims and compensation days associated with neck, back, multiple injuries and industrial diseases, 1984 - 1988



	1984	1985	1986	1987	1988
Claims	41.3	44.1	46	48.1	48.7
Comp Days	51.7	54	57.9	59.7	62.5

Source: Annual Reports and custom Tabulations prepared by WCB of Manitoba for PMS&K

Exhibit IV-14
Average days of compensation paid by type of injury
WCB of Manitoba, 1984 - 1988



	1984	1985	1986	1987	1988
Back *	28.1	28.9	30.2	33.3	36.1
All Other	18.5	19.4	18.7	20.9	20.5

* *Category includes neck, back, multiple injuries and industrial diseases.*
Source: Annual Reports and custom tabulations prepared by WCB of Manitoba for PMS&K

During the 1984-1988 period, changes in the mix of injuries accounted for six (6) percent of the increase in total temporary time loss compensation costs. This increase occurred primarily in response to increases in the share of claims with neck, back, or multiple injuries or claims associated with industrial diseases and the tendency for these injury types to experience longer claim durations. Among this group, injuries related to the back accounted for the majority of the increase in costs. The rising incidence of back-related injuries may result in continued cost increases and as such, may warrant further investigation by the board.

Weakening of the provincial economy and continuing high rates of unemployment have probably also affected compensation costs by influencing the re-employment opportunities available to workers who have recovered from injuries and employer re-hiring practices. The contribution of these factors to changes in compensation costs, however, remains unclear.

The substantial increases in Manitoba's unemployment rate during the 1981 to 1983 recession and the corresponding jump (of 35 percent) in the length of temporary time loss claims during the same period strongly suggests a linkage between unemployment rates and compensation costs. Data were not available to the study to investigate changes in the re-hiring practices of employers or the impact of reduced employment opportunities on the length of temporary time loss claims and compensation costs.

The availability of a wider range of medical diagnostic and treatment procedures and the trend for greater use of medical specialists are also believed to have contributed to longer claim periods. The effect of these external factors on compensation costs is not measurable.

According to senior WCB staff interviewed for this study, some portion of the increase in compensation costs resulted from changes in medical diagnostic and treatment practices which have tended to lengthen recovery periods. Staff cited delays associated with increased use of specialists and the more extensive range and utilization of diagnostic and testing procedures. With respect to treatment, longer waiting periods for surgery and in particular, the the trend toward more extensive use of physio-therapy are also believed to have lengthened recovery periods and resulted in significant compensation cost increases. The precise extent of increases associated with these changes, however, remains unknown. Further information regarding this issue is provided in Chapter V.

G. THE ROLE OF INTERNAL FACTORS

To this point, the analysis of factors affecting temporary time loss compensation costs has focused primarily on events and circumstances over which the WCB exerts little control. Although uncertainty remains with respect to the exact contribution of certain external factors to cost increases, the analysis has been able to account for roughly 55 to 60 percent of the increase (primarily through inflation). The remaining 40 to 45 percent of the increase in compensation costs experienced during the study period are believed to relate to factors over which the Board exerts or could exert direct control. These internal factors follow from the policies, management and operating practices of the Board.

A number of changes in Board policy and operating practices appear to have worked in combination with legislative changes to dramatically alter the context of adjudication and claim management. Jointly, these changes had the effect of increasing the administrative workloads of adjudicators, reducing the flow and quality of information concerning claimant medical status and creating uncertainty with respect to the basis for claim termination. Changes to the context of adjudication are believed to have contributed to longer claim periods and increased costs.

In Manitoba, as in other WCB jurisdictions, adjudicators play a critical role with respect to managing temporary time loss claims. Adjudicators represent the point of contact between the injured worker and Board, and are responsible for decisions concerning the

awarding, rejection, continuation and termination of benefits and the referral of workers to other Board services such as vocational rehabilitation.

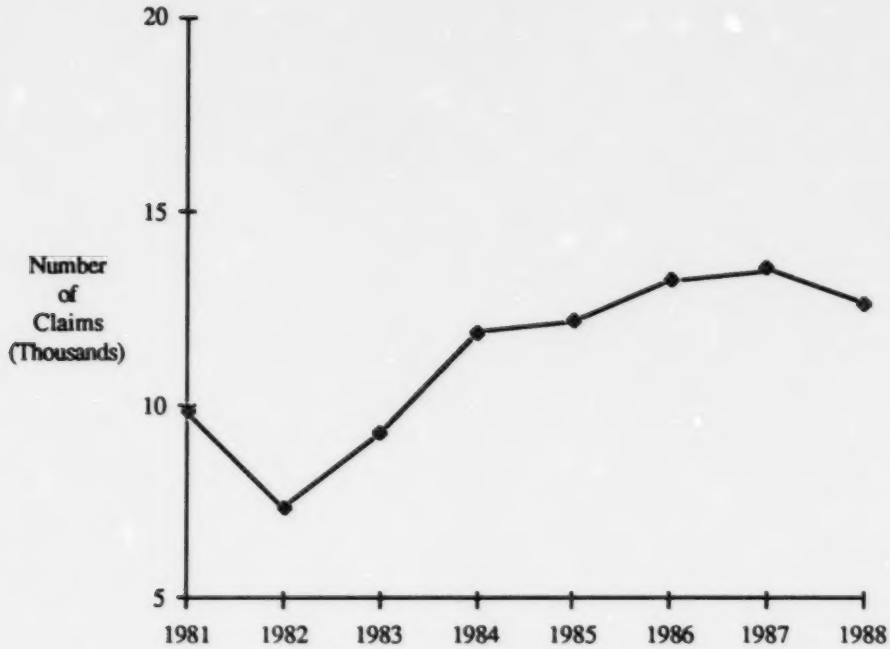
According to senior WCB staff interviewed, Board policy and legislative changes introduced during the study period altered the context within which adjudicators work, created greater uncertainty about the status of claims and collectively resulted in increased compensation costs. Most of the issues raised by WCB staff could neither be verified through statistical research nor accurately measured in terms of their contribution to compensation cost increases.

Legislative changes in 1982 permitting worker access to WCB file information and medical reports affected information quality concerning worker health status and increased the administrative workload of adjudicators.

Access to information legislation (1982) is believed to have affected the content and degree of frankness of medical practitioner reports concerning the health status of injured workers and added to the administrative workload of adjudicators by creating the need for additional and more precise documentation (other than practitioner reports) with respect to the rationale for adjudicative decisions. Although no conclusive evidence was compiled concerning changes in medical reporting behaviour, it is clear that medical opinions represent one of the key factors affecting an adjudicator's decision to continue or terminate a claim. As such, changes in medical reporting practices have the potential to affect compensation costs indirectly by contributing to adjudicator uncertainty concerning the worker's ability to return to work.

Greater worker access to files is also believed to have created the need for adjudicators to compile more detailed and extensive file documentation. According to staff, this resulted in more time spent on paperwork and less time available for case monitoring and investigation. Evidence of the growing workload of adjudicators is suggested by the changes in the ratio of compensation days paid to the number of adjudicators. This ratio increased from roughly 15,250 days per adjudicator in 1980/81 to 19,100 days per adjudicator in 1986/87 (an increase of 25 percent) and suggests that the Board's adjudicative complement may be understaffed (also see Chaper VIII). Adjudicator backlogs with respect to claim processing and management increased significantly during the study period, in spite of the doubling of the adjudicator complement from 13 to 26. Evidence of the growing backlogs is provided by statistics on the number of claims which were not settled during the year in which they were reported (see Exhibit IV-15), a situation caused by both longer claim periods, as well as delays in opening and processing new claims.

Exhibit IV-15
Claims not settled during the year of occurrence
WCB of Manitoba, 1981 - 1988



	1981	1982	1983	1984	1985	1986	1987	1988
No. of Claims	9.844	7.379	9.31	11.849	12.145	13.209	13.505	12.59

Source: Annual Reports and custom tabulations prepared by WCB of Manitoba for PMS&K

Dissolution of the claims review process in 1982 transferred greater responsibility for management of difficult claims to junior adjudicators and further increased the administrative workloads of adjudicators.

Prior to 1982, Board policy required all adjudicators to consult regularly with senior adjudicative staff with respect to claim management and decisions related to termination or continuation of long term, problematic or suspicious claims. In instances where termination was deemed warranted, the review committee would assume the administrative task of drafting all required correspondence. In abandoning the claims review process, decision making responsibility and the associated administrative workload of monitoring and managing these difficult claims was vested solely with the adjudicator. This is believed to have further increased the workload of adjudicators and also contributed to a loss of quality control concerning adjudicator performance.

Perceived inconsistency between stated Board policy and the decisions rendered by the Board's appeal bodies is believed to have affected adjudicator behaviour by creating greater uncertainty with respect to the policy basis for claim termination.

According to staff interviewed, several instances have occurred in which the basis for successful appeal decisions appeared to be in conflict with stated Board policy. This factor, in conjunction with the lack of a policies and procedures manual, is believed to have led to confusion among adjudicators with respect to claim termination policy and, in the absence of effective quality controls and performance monitoring, created an environment in which the easiest course of action for an adjudicator was to continue to pay benefits.

The 1985 Board decision to abandon unsolicited medical reporting is believed to have increased compensation costs indirectly by reducing the amount of medical information available for adjudicative decisions, creating delays in obtaining medical data and increasing the administrative burden of adjudicators.

In 1985, the Board reached agreement with medical practitioners to change the reporting practices on WCB claims. Prior to this change, medical reports were forwarded as a matter of course from practitioners treating WCB patients and reporting payments were a set percentage of medical service costs. In 1985, Board policy permitted payment for reports only when solicited by the Board. According to staff, the effects of this change have been to increase adjudicator workloads, reduce the amount of medical data available to adjudicators and cause delays in processing and terminating claims. Increases in claim duration (and compensation costs) are believed by WCB staff to have occurred as a result.

Adjudicator inexperience is believed to have lowered the quality of claim management and resulted in longer claims.

During the 1982-1985 period, a number of additional adjudicative staff (12 in total) were added to adjudicator complement of the Board. According to senior staff interviewed for this study, the quality of claim management was reduced as several new adjudicators lacked sufficient experience to manage workloads effectively and identify problematic claims.

The lack of a solid management information system in support of performance, activity and financial monitoring is believed to have contributed to loss of management control over costs.

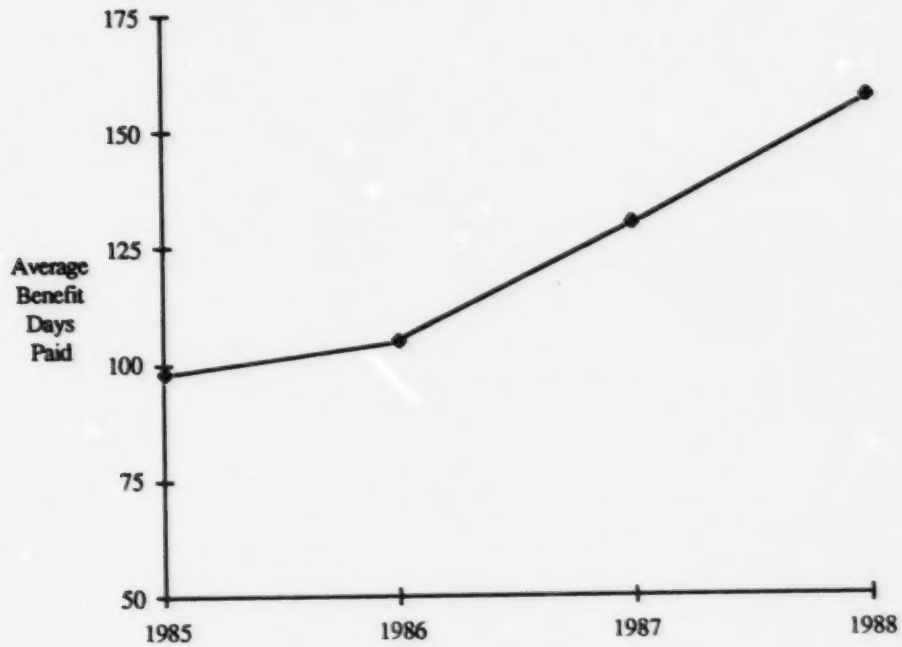
Throughout most of the study period, the Board operated without a management information system capable of effectively monitoring Board activities, finances and staff performance. Modernization of the Board's data system did not commence until 1985 and the system is still undergoing revision and refinement. Until quite recently, the Board lacked the internal information and communication systems needed for sound financial and claims management.

The expansion of vocational rehabilitation services during the mid 1980's appears to have contributed to longer temporary time loss claim durations and higher compensation costs as larger numbers of claimants were held on temporary compensation while awaiting access to vocational rehabilitation. This process probably accounts for the rapid increase in the volume of long term claims reported earlier in this section.

During the 1983-1986 period, the Manitoba WCB embarked on a program of rapid expansion in vocational rehabilitation services. According to senior WCB staff, temporary time loss benefits for many claimants were continued while awaiting access to the new range of rehabilitation services. Interview evidence also suggests that considerable fragmentation of the WCB services accompanied the expansion process and that the vocational rehabilitation unit tended to operate in isolation from the other WCB benefit units. This situation was confirmed by both benefits unit and vocational rehabilitation staff.

Evidence also suggests that considerable delays were incurred in transferring injured workers to vocational rehabilitation. Data available for the 1984 to 1988 segment of the study period (Exhibit IV-16), reveals a clear trend toward longer periods from the time of claimant referral to vocational rehabilitation and the transfer of responsibility for benefits (i.e. 1st rehabilitation payment). This finding suggests that a substantial portion of the long term claims (identified as a major source of compensation cost increases earlier in this study), related to claimants referred to vocational rehabilitation.

Exhibit IV-16
Average compensation days paid after referral to Vocational Rehabilitation
WCB of Manitoba, 1980 - 1988



	1985	1986	1987	1988
Days	98	105	130	157

Source: Annual Reports and custom tabulations prepared by WCB of Manitoba for PMS&K

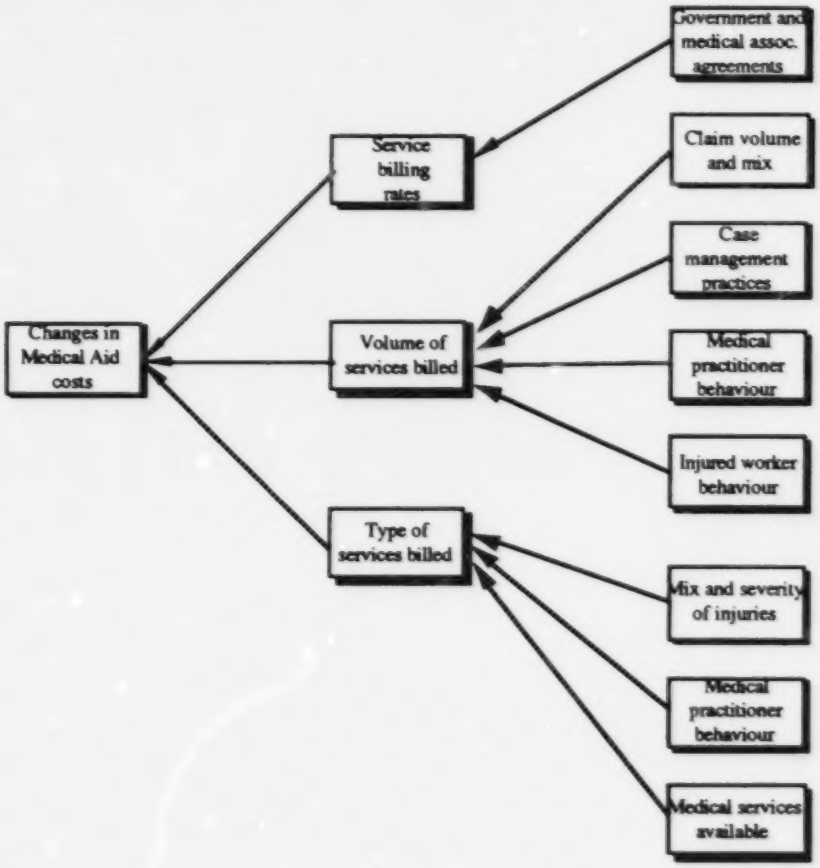
V

MEDICAL AID EXPENDITURES

Although the majority of health care expenses incurred by residents of Manitoba are paid by the province's health care plan, medical services to injured workers covered by workers compensation are paid entirely by the Board. Medical aid payments, for the most part, are paid directly to service providers.

Annual medical aid expenditures are determined by three main factors including the number, type and cost of services provided.

Exhibit V-1
Elements of medical aid cost component



Conceptually, three variables contribute to changes in medical expenditures: the billing rate or cost of services, the number or volume of services billed and the type of medical services provided. Changes over time in these components of medical costs occur in response to a wide range of factors as illustrated in Exhibit V-1.

Changes to service billing rates occur periodically in response to service fee agreements negotiated between the province and the Manitoba Medical Association. Negotiated increases to the billing rates, in general, reflect the increased cost of providing services; however, other factors may be considered in setting rates. The effect of billing rate increases on medical aid expenditures, however, derives in large part from the broader economic process of inflation. Although the process of establishing billing rates is largely external to the WCB system, the WCB does exercise some control over billing rates. One example, relates to the issue of payment of medical reporting fees.

Changes in medical aid expenditures also occur in response to shifts in the number or volume of services billed. This cost factor can be influenced by several external events, including the number and severity of accidents and the treatment and billing practices of medical practitioners. The volume of services billed, however, may also be influenced by the claim management practices of the Board, especially in cases involving more complicated, long term claims. As noted in the previous section of this report, the average duration of claim rose sharply during the study period. This situation implies a trend toward longer treatment periods and increases in the number of services provided per claimant. This, in turn, could lead to longer periods on temporary time loss benefits (i.e. a two-way effect).

As billing rates vary according to the type of medical service provided, shifts in the mix of services impact on medical aid expenditures. External factors including the type and severity of injuries and the range and availability of diagnostic and treatment procedures (and facilities) can also contribute to changes in the need for and provision of individual types of services.

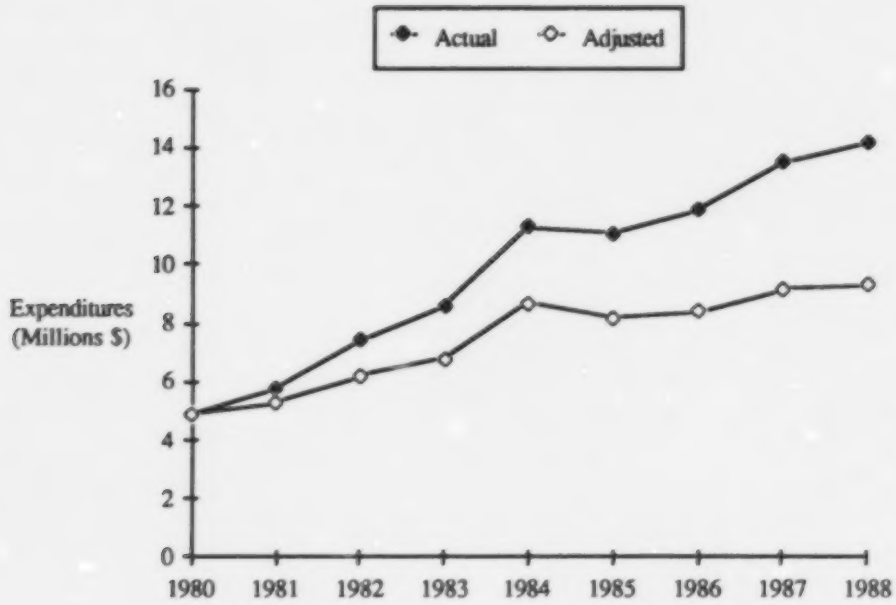
As the discussion above illustrates, many of the factors affecting expenditures for medical aid are largely outside of the Board's control. Responsibility for management of the medical services to injured workers rests primarily with the individual worker and the medical practitioner.

Due to data restrictions, detailed analysis of the factors affecting increases in medical aid expenditures was possible only for the 1984-1988 segment of the study period.

A. TRENDS IN MEDICAL AID EXPENDITURES

Medical aid expenditures rose from approximately $4.9 million in 1980 to $14.2 million in 1988, an increase of roughly 190 percent during the study period.

Exhibit V-2
Medical Aid expenditures
WCB of Manitoba, 1980 - 1988 (Actual and adjusted for inflation)



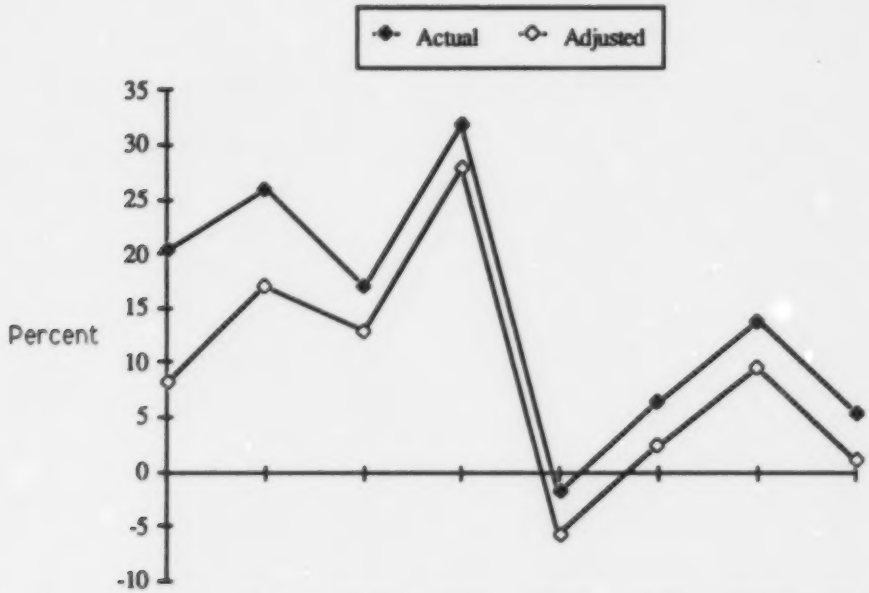
	1980	1981	1982	1983	1984	1985	1986	1987	1988
Actual	4.9	5.8	7.4	8.6	11.3	11.1	11.9	13.5	14.2
Adjusted	4.9	5.3	6.2	6.8	8.7	8.2	8.4	9.2	9.3

Source: Annual Reports and custom tabulations prepared by WCB of Manitoba for PMS&K

Exhibit V-2 illustrates the annual expenditures for medical aid benefits for the 1980-1988 period. As illustrated in the Exhibit, increases in medical aid costs were experienced in all time periods except 1985. Expenditure increases also exceeded the rate of inflation (as measured by the all item CPI) for all years except 1985. After adjustment for inflation, medical aid costs were roughly 91 percent higher in 1988 than in 1980. Over the 1980-1988 study period, the cumulative increase in medical aid costs totaled $ 43 million or about 11 percent of the cumulative increase in WCB total operating expenditures.

The most rapid increases in medical aid costs were recorded for the 1980-1984 period. Rates of increase reported after 1984 were considerably lower, but with the exception of 1985, remained above the inflation rate.

Exhibit V-3
Annual change in Medical Aid expenditures
WCB of Manitoba, 1980 - 1988 (Actual and adjusted for inflation)



	80-81	81-82	82-83	83-84	84-85	85-86	86-87	87-88
Actual	20.3	25.9	17	31.9	-1.8	6.4	13.8	5.29
Adjusted	8.1	17	12.9	27.9	-5.7	2.4	9.5	1.1

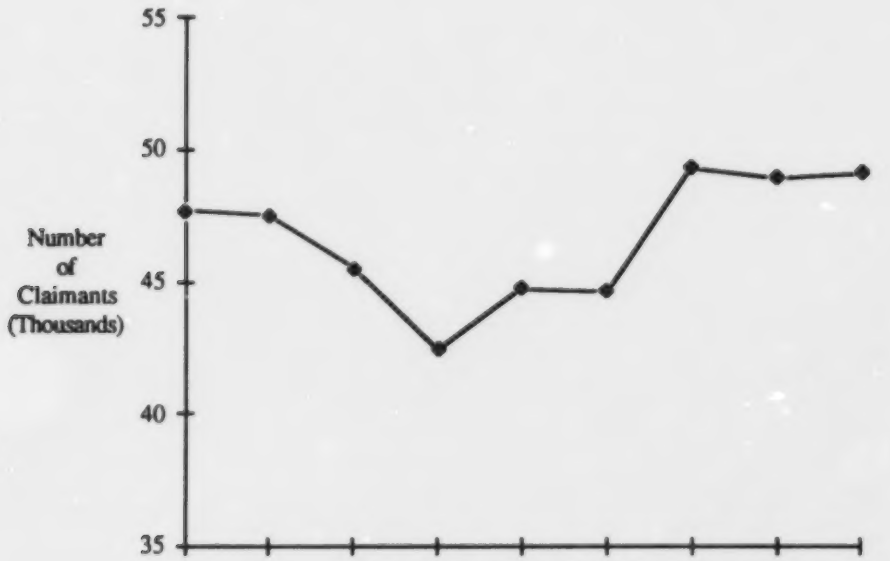
Source: Annual Reports and custom tabulations prepared by WCB of Manitoba for PMS&K

The actual and inflation adjusted annual rates of change in medical aid costs are illustrated in Exhibit V-3. Although substantial annual fluctuations occurred with respect to changes in medical aid expenditures, significantly higher rates of increase were reported during the 1980-1984 segment of the study period. The rapid rates of increase experienced during the 1980-1984 period were followed by a small decline in medical aid benefits in 1985. The decline reported in 1985 could not be accounted for by changes in claim volume or other external factors. The most probable cause related to billing delays associated with policy changes surrounding Board payment of medical reporting fees.Since that time, however, a resumption of increases in medical aid costs has occurred at rates exceeding inflation.

B. CHANGES IN CLAIM VOLUME

During the 1980-1983 period, the number of claims receiving medical aid declined by roughly 11 percent (5,300 claims). Since that time, however, the number of claims involving medical aid benefits has increased sharply and played a major role in increasing in medical aid expenditures.

Exhibit V-4
Estimated number of claimants receiving Medical Aid benefits
WCB of Manitoba, 1980 - 1988



	1980	1981	1982	1983	1984	1985	1986	1987	1988
Claims	47.7	47.5	45.5	42.4	44.7	44.6	49.3	48.9	49.1

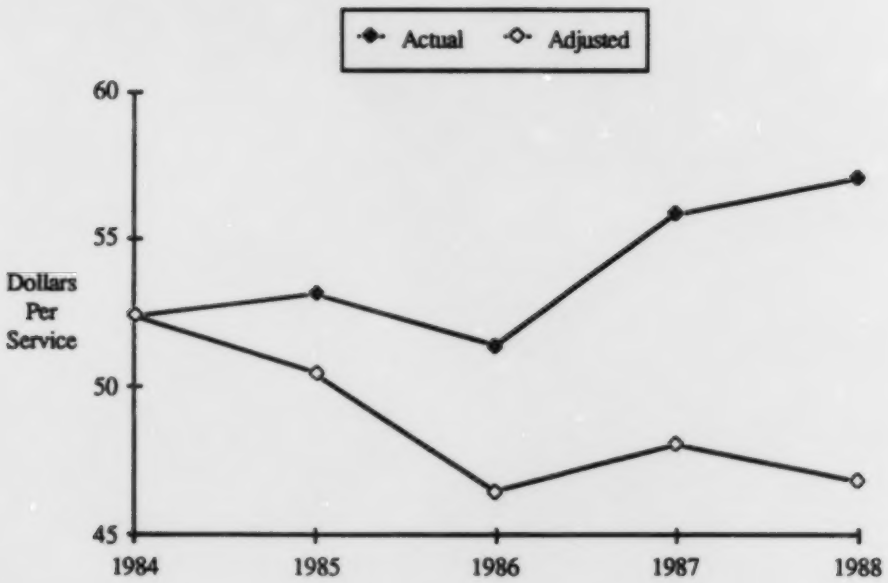
Source: Annual Reports and custom tabulations prepared by WCB of Manitoba for PMS&K

Exhibit V-4, which presents data on the number of claims receiving medical aid benefits, reveals two distinct trends in medical aid claim volumes. During the 1980-1983 segment of the period, claim volume declined from roughly 47,700 to about 42,400, a reduction of about 11 percent. During the latter portion of the study period, claim volume rebounded to levels slightly higher than those recorded at the outset of the study period. Most of this increase was attributable to a rise of about 4,700 claims in 1986. Although evidence suggests that increases in claim volumes did not account for significant cost increases during the 1980-1983 period, this factor has since played a major role and accounted for 55 percent of the cumulative increase in medical aid expenditures reported during the 1984-1988 period.

C. CHANGES IN BILLING RATES

During the 1984-1988 period, the average cost per medical service increased moderately from roughly $52 to $57 per service. After adjustment for inflation, however, the average cost per service declined during the period. Increases in service billing rates accounted for only 13 percent of the increase in total medical expenditures during the 1984-1988 period.

Exhibit V-5
Average cost per medical service billed
WCB of Manitoba, 1984 - 1988 (Actual and adjusted for inflation



	1984	1985	1986	1987	1988
Actual	52.39	53.14	51.38	55.83	57.08
Adjusted	52.39	50.46	46.46	48.09	46.86

Source: Annual Reports and custom tabulations prepared by WCB of Manitoba for PMS&K

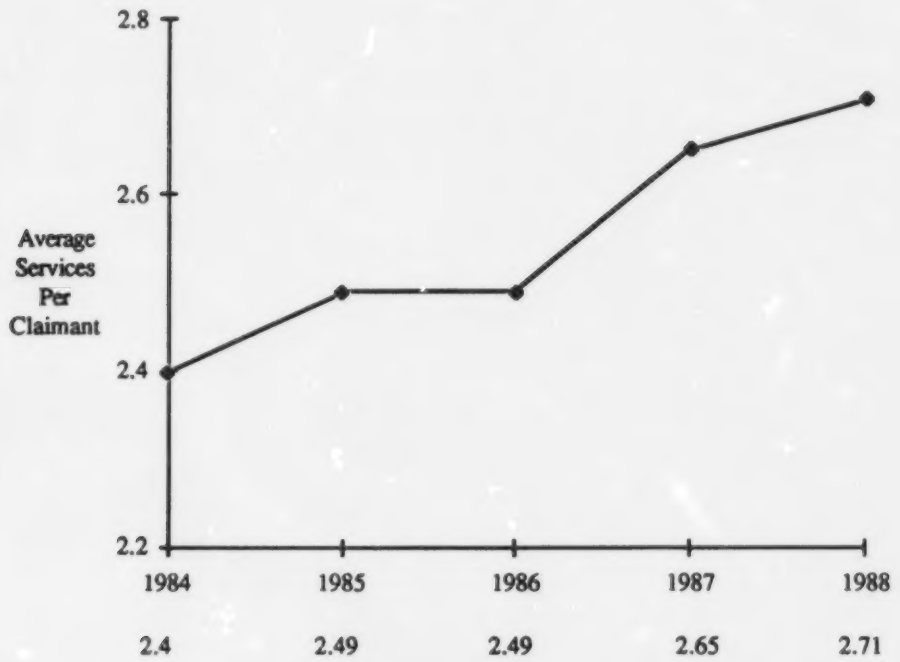
Data concerning the average cost per service are presented in Exhibit V-5. The Exhibit suggests that in actual dollars, average billing rates increased at a moderate rate during the 1984-1988 period. Average service billing rates, however, increased at a slower pace than inflation (as measured by the all items CPI) and in 1984 constant dollars were lower at the end of the study period. Service billing rate increases, however, did play a

significant role in increasing medical aid expenditures and accounted for about 13 percent of the cumulative increase in medical aid costs reported during the 1984-1988 period.

D. CHANGES IN NUMBER OF SERVICES BILLED

Since 1984, the number of services billed per patient increased steadily from roughly 2.4 billings per claimant to 2.7 billings per claimant. The provision of additional services per claimant accounted for approximately 16 percent of the cumulative increase in medical aid expenditures.

Exhibit V-6
Average number of services "billed" per claimant
WCB of Manitoba, 1984 - 1988



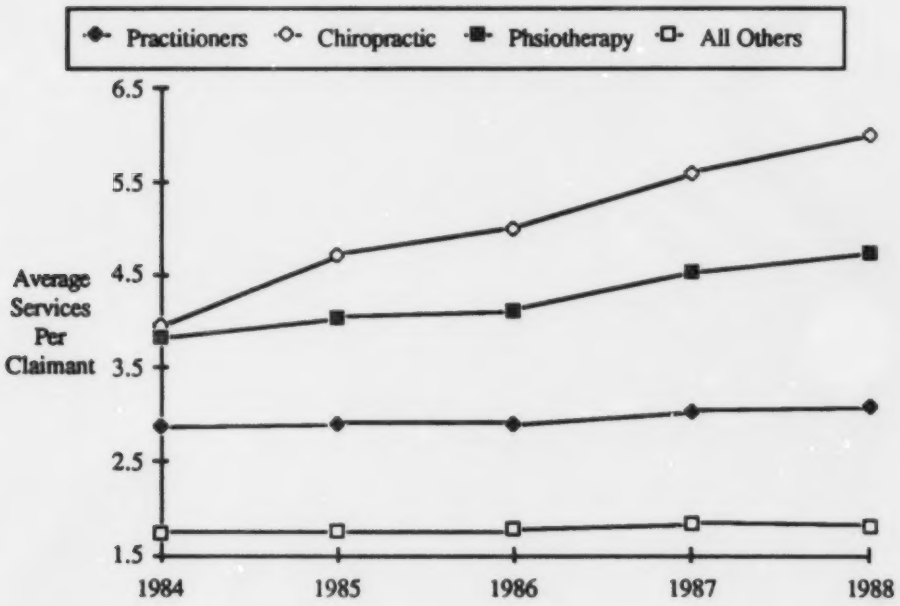
Source: Annual Reports and custom tabulations prepared by WCB of Manitoba for PMS&K

Increases in medical aid expenditures have also occurred in response to increases in the frequency of service use. As illustrated in Exhibit V-6, the average number of billings per claimant increased throughout the 1984-1988 period. This factor, which reflects

changes in medical practitioner behaviour was responsible for about 16 percent of the cumulative increase in medical aid costs during the 1984-1988.

More frequent use of chiropractic and physiotherapy services accounted for much of the increase in average number of services billed per claimant. Although this reflects shifts in the mix of injuries incurred (i.e. more back injuries), it probably also reflects the increased duration of claims.

Exhibit V-7
Average number of services billed per claimant by service type
WCB of Manitoba, 1984 - 1988



	1984	1985	1986	1987	1988
Practitioners	2.87	2.91	2.89	3.04	3.08
Chiropractic	3.96	4.72	5.01	5.6	6
Physiotherapy	3.83	4.05	4.12	4.52	4.74
All Others	1.74	1.76	1.78	1.85	1.82

Source: Annual Reports and custom tabulations prepared by WCB of Manitoba for PMS&K
Note: Excludes medical report billings

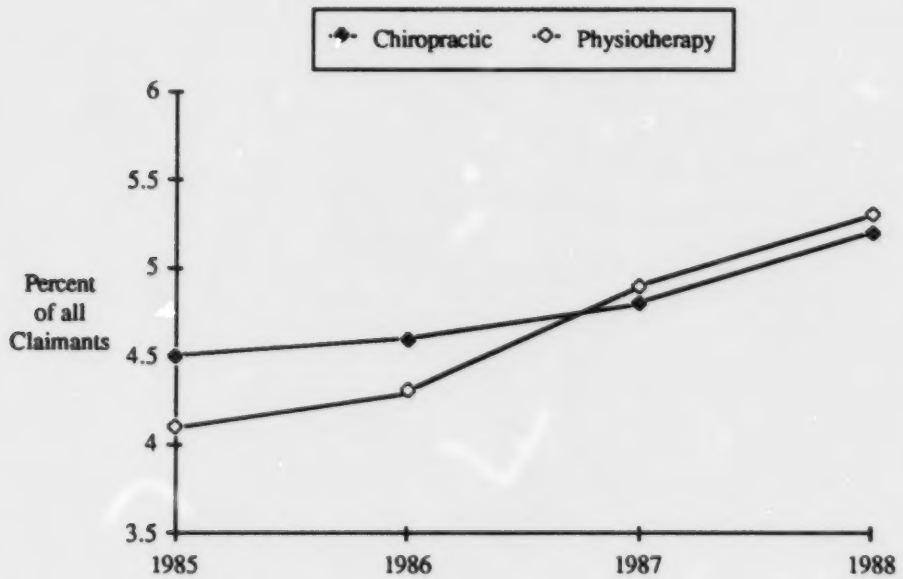
Exhibit V-7 illustrates changes in the billing frequency for selected types of medical services. As the Exhibit reveals, the average number of chiropractic and physiotherapy services per claimant has tended to rise much more quickly than other medical services. Explanation for the increased frequency or use of these services appears to be related, in

part, to the increased incidence of back injury claims, as noted in the previous section of this study.

E. CHANGES IN TYPE OF SERVICE

Changes in the types of medical services provided resulted in modest cost increases during the 1984-1988. This factor accounted for 6 percent of the cumulative increase in medical aid costs.

Exhibit V-8
Proportion of claimants receiving selected medical services



	1985	1986	1987	1988
Chiropractic	4.5	4.6	4.8	5.2
Physiotherapy	4.1	4.3	4.9	5.3

Source: Annual Reports and custom tabulations prepared by WCB of Manitoba for PMS&K
Note: Excludes medical report billings

During the 1984-1988 period, changes occurred in the range or type of medical services provided to injured workers. These changes were independent of the type of injury treated and probably reflect shifts in the behaviour of practitioners with respect to diagnostic and treatment procedures. The most notable changes involved the more frequent use of physiotherapy and chiropractic services among injured workers. The share of all claimants receiving these two services increased more quickly than for all other categories

of service. This situation, which cannot be accounted for by changes in injury types, suggests that chiropractic and physiotherapy treatments are being sought or prescribed more often. The increased costs of these services accounted for about six (6) percent of the total increase in medical aid costs during the 1984-1988 period.

F. CHANGES IN TYPE OF INJURY

As noted in the previous section of this report, shifts occurred in the mix of injuries of claimants receiving temporary time loss benefits. The injury mix among medical aid claimants also changed during the study period and contributed to increased medical aid costs. This factor accounted for about 7 percent of the total increase in medical aid costs during the 1984-1988 period.

As with temporary time loss claimants, the mix of injuries among claimants receiving medical aid changed during the study period. To some extent, the changes identified among medical aid claimants were due to temporary time loss claims, as these claims represent more than one half of all medical aid claims. The tendency for increases in the incidence of back, neck and multiple injury claims and cardio/respiratory and industrial diseases accounted for most of the increased costs attributable to this variable. Back injury claims, in particular, accounted for the majority of the cost increase associated with changes in injury type.

VI

PENSIONS

The Workers Compensation Act of Manitoba provides for pension benefits to be paid to workers who suffer a permanent impairment as a result of injury due to employment and to the survivors of workers fatally injured. In general, pension benefits take one of three forms, as described briefly below:

- **Permanent Disability Pensions** (PPD) consisting of periodic payments to workers who have sustained a permanent partial disability.

- **Lump Sum Payments** consisting payments to workers who elect, with the approval of the Board, to receive their pension benefits at one point in time, rather than through regular payments (i.e. to commute the pension).

- **Survivor Benefits** consisting of payments to the spouse and/or dependent children of workers fatally injured. Survivor benefits are calculated in much the same fashion as benefits for temporary time loss compensation, but are payable until death (or remarriage) of the spouse.

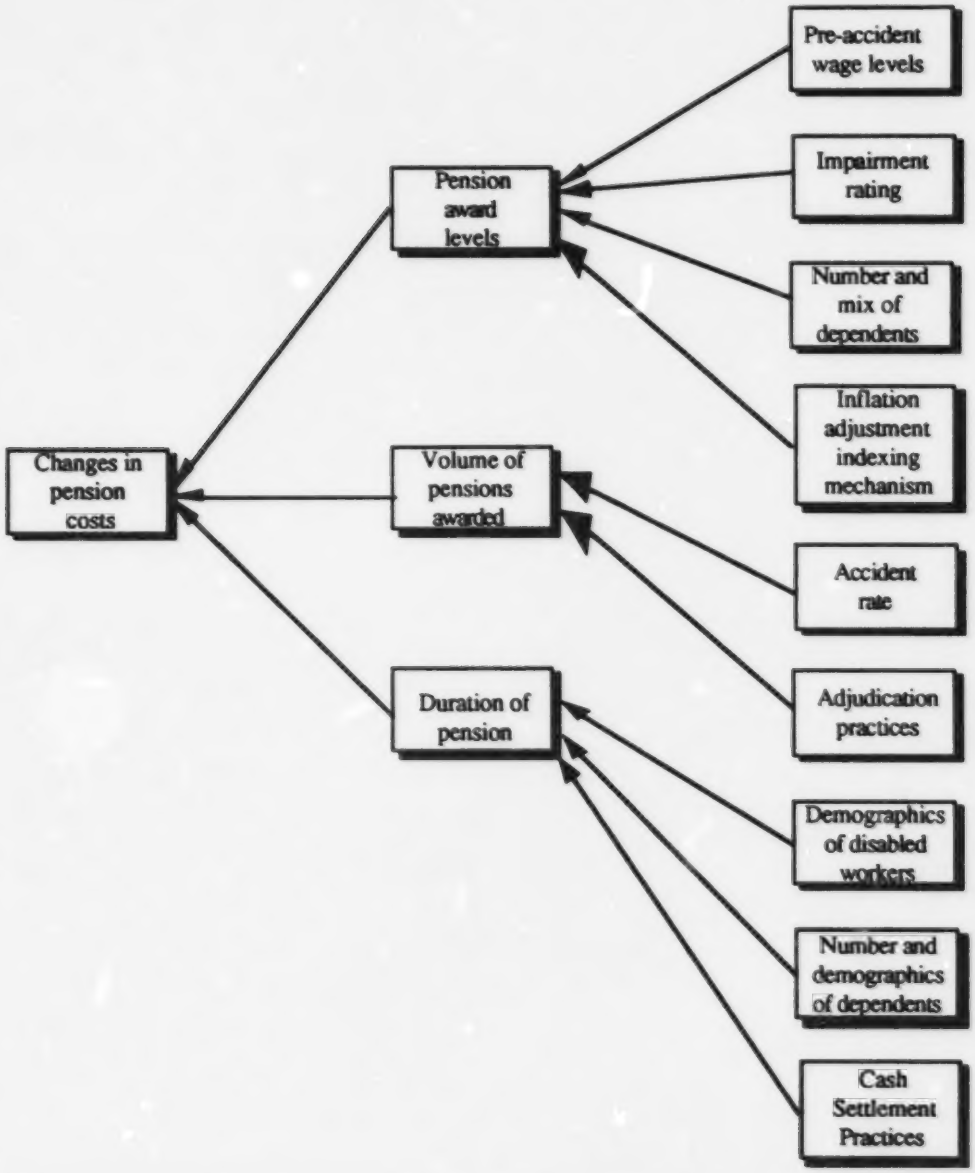
Pension benefits paid by the Board are non-taxable and not reduced by any other benefits received by the worker or the workers survivors (i.e. private pension, C.P.P. benefits, etc.).

In addition to the benefit types identified above, the Workers Compensation Act also provides for the awarding of **special additional compensation** (SAC). This benefit can be granted by the Board in situations where compensation for a permanent partial disability, as normally calculated, is not sufficient to cover the loss in earning capacity that has resulted from the injury. The SAC payment is subject to a limit of a fixed percentage of the worker's average pre-accident earnings and, unlike pensions, can be offset by other income support programs (i.e. UIC, CPP).

In Manitoba, SAC payments are registered as vocational rehabilitation costs until such time as they are converted (i.e. capitalized) to permanent pensions. It is, however, a condition that a permanent partial disability award be made prior to awarding of SAC. This condition creates a situation in which only a portion of the benefits paid to some disability claimants are in the form of pension payments. Additional SAC payments, which in many instances are large, may be paid for a time (up to 3 years) through vocational rehabilitation. Although discussed in this section, analysis of SAC costs is presented in the vocational rehabilitation section of the report.

In general, increases in pension costs are determined by three main factors, including award levels, the number or volume of pensions awarded and the duration of pension claims (See Exhibit VI-1).

Exhibit VI-1
Elements of Pension Cost Component graphic



Initially, permanent disability awards are calculated as 75 percent of the worker's pre-accident wage multiplied by an impairment rating which measures the severity of the worker's disability. The average wage provision is subject to a maximum (currently

$36,000). The nature of the pension benefit calculation implies that changes in pre-accident wage levels and in the severity of disabilities incurred will affect pension costs directly. Changes in wages may be expected to affect pension costs in much the same fashion as they affect temporary time loss compensation costs.

Changes in the severity of impairment can result in either increases or decreases in pension costs. For purposes of pension calculation, the degree of impairment is set by the Board according to a standardized rating system. As the system for setting impairment ratings did not change during the period of this study, changes associated with this factor directly reflect changes in the severity of injuries compensated or the propensity to issue nominal or token awards.

Although initial award levels are determined by wage and impairment factors, existing pension awards (and the insurable maximum) are adjusted on a periodic basis (historically every two years) to protect worker incomes from erosion through inflation. Inflation adjustments are normally made to all pension claims awarded two years prior to the date of the adjustment (i.e. the 1987 adjustment affects pensions initially awarded in 1985 or earlier). Significant increases in pension costs can occur a result of indexing provisions.

Changes in pension expenditures will also occur in response to changes in the volume or number of pensions awarded. Although subject to time lags, the volume of new pensions awarded is influenced by a wide range of economic factors which contribute to changes in the number and types of accidents reported. These factors were discussed earlier in our analysis of temporary time loss compensation expenditures. Board practices with respect to adjudication and claim management, however, can also influence the volume of new pension awards. Claim management practices, for example, can affect the timing of conversion of temporary compensation benefits to pensions. Moreover, as discussed above, policies and practices with respect to benefit augmentation (i.e. special additional compensation) can also influence pension claim volumes.

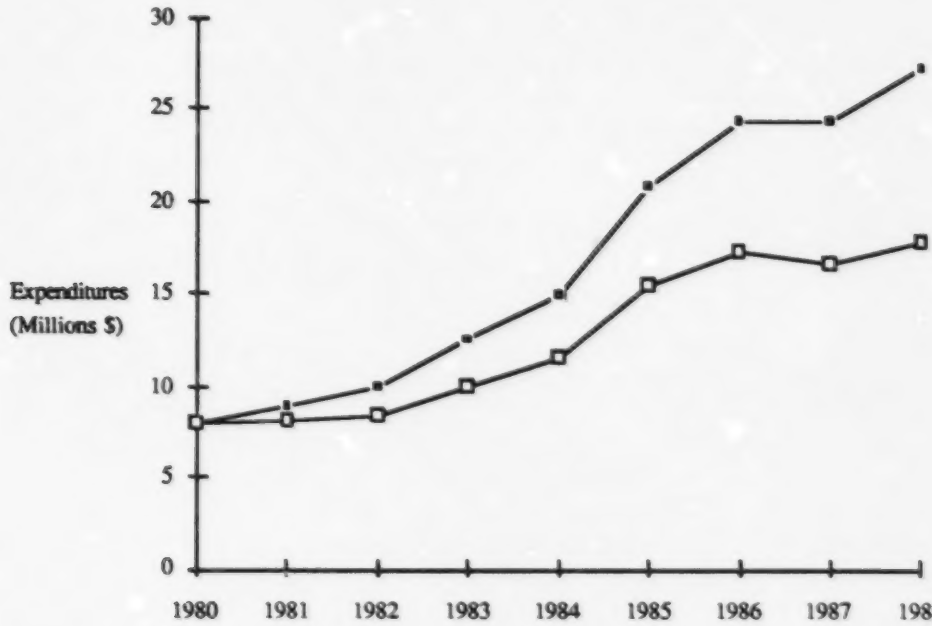
The third main factor affecting pension costs relates to the length or duration of time for which benefits are provided. Benefit duration is affected both by external factors (e.g. the age and health of claimants), as well as by Board practices. The most important Board practice in this regard relates to the utilization of cash settlements or lump sum payments to commute (and terminate) pensions. The decision to commute pensions through lump sum settlements is, of course, also subject to the decisions of pension claimants.

The study's review of pension costs has been restricted, for the most part, to consideration of factors related to pension award levels and the volume of pensions. Due to data constraints, no detailed analysis has been undertaken with respect to factors affecting the duration or length of pensions.

A. TRENDS IN PENSION EXPENDITURES

Expenditures for permanent disability and survivor pension benefits increased from $7.8 million in 1980 to more than $27 million in 1988, an increase of 247 percent.

Exhibit VI-2
Permanent disability/survivor pension expenditures
WCB of Manitoba, 1980 - 1988 (actual and adjusted for inflation)



	1980	1981	1982	1983	1984	1985	1986	1987	1988
Actual	7.9	8.8	9.9	12.5	14.8	20.8	24.3	24.3	27.2
Adjusted	7.9	8	8.3	9.9	11.4	15.4	17.3	16.6	17.8

Source: Annual Reports and custom tabulations prepared by WCB of Manitoba for PMS&K

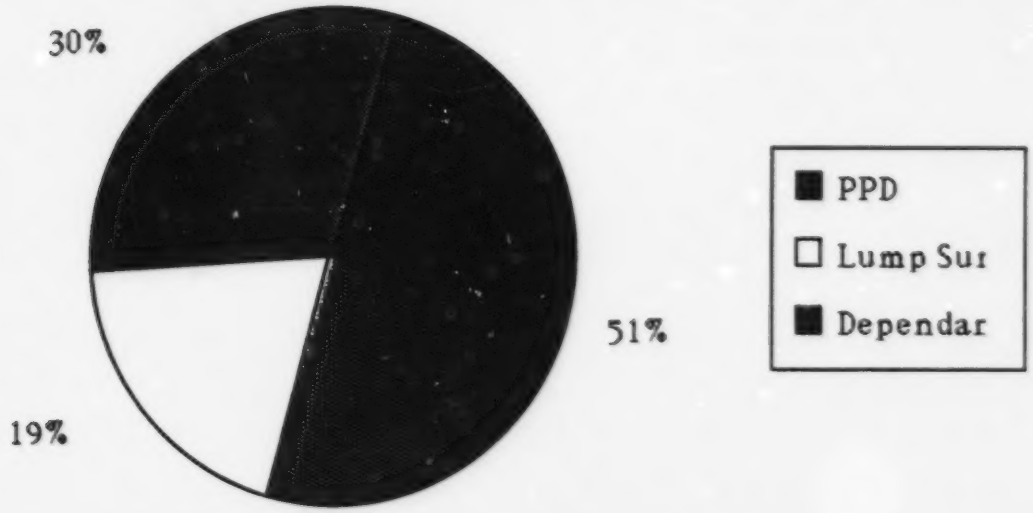
As illustrated in Exhibit VI-2, significant increases in pension expenditures were reported during the study period, especially during the mid portion of the period (i.e. 1984-86). During this time, expenditures rose from about $15 million to more than $24 million, an increase of about 60 percent. During the entire study period, pension costs increased at an average annual rate of 15.4 percent. Cost increases after adjustment for inflation averaged slightly more than 10 percent per year throughout the period.

The cumulative increase in pension expenditures for the study period totaled roughly $79 million, representing close to 21 percent of the $387 cumulative increase in

total WCB expenditures. During the latter portion of study period (1985-1988), for which detailed data were available, the cumulative increase in pension costs totaled $13.4 million.

Detailed data on components of pension expenditure increases were not available for the 1980-1984 period. Data for the 1985-1988 period (See Exhibit VI-3), however, reveal that the majority of the increase in pension costs was associated with permanent disability claims (51 percent), followed by dependent (or survivor) benefits (30 percent) and lump sum payments (19 percent).

Exhibit VI-3
Share of cumulative pension payment increase

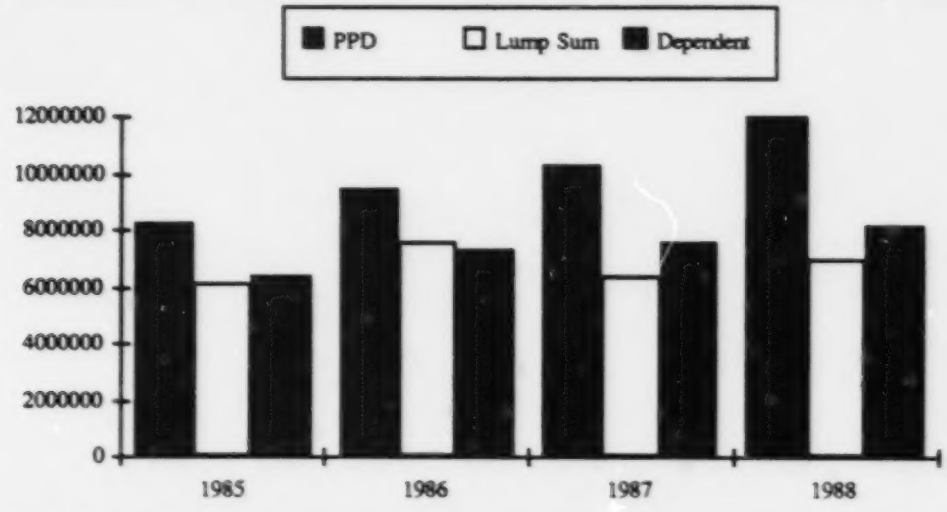


Source: Annual Reports and custom tabulations prepared by WCB of Manitoba for PMS&K

Permanent disability payments increased more rapidly than either survivor benefits or lump sum payments during the later portion of the period.

Although all three components of pension expenditures experienced increases during the study period, expenditures for permanent disability pensions appear to have increased most rapidly (see Exhibit VI-4). During the 1985-1988 period, for which detailed data were available, permanent disability pension payments increased at an average annual rate of about 13 percent compared to 9 percent for dependent or survivor benefits and roughly 5 percent for lump sum payments. This pattern suggests that the use of lump sum payments has become, in relative terms, less common. Although reasons for this were not pursued in the study, the comparatively slow increase in lump sum settlements may reflect the "unattractiveness" of discount rates used by the Board to establish settlement amounts. Further analysis of this issue appears to be warranted.

Exhibit VI-4
Pension benefit payment by type
WCB of Manitoba



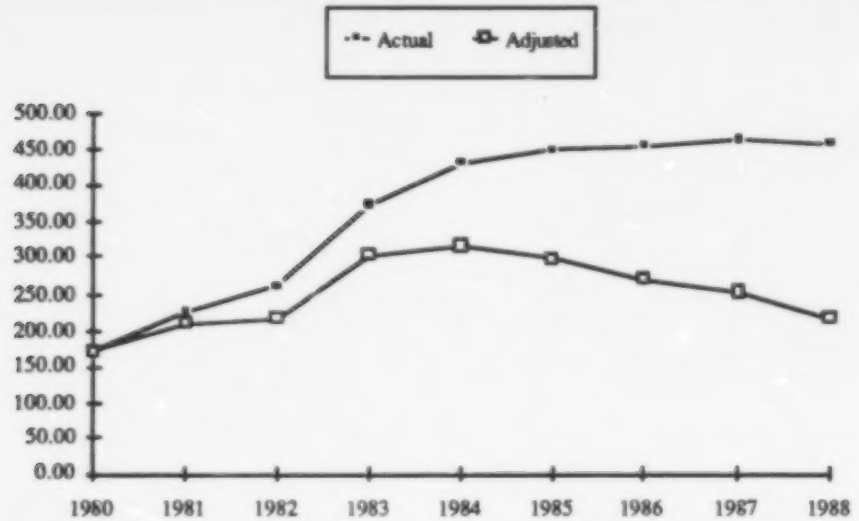
Source: Annual Reports and custom tabulations prepared by WCB of Manitoba for PMS&K

B. INFLATION RELATED FACTORS

Increases in the pre-accident wages of new pension recipients increased by about 176 percent during the study period. Wage increases were most rapid during the 1980-1984 period. After 1984, wages rose more slowly, at rates well below inflation. Although wage inflation played a major role in pension cost increases early in the study period, the contribution of this factor during the 1985-1988 period was small (about 15 percent of the cumulative increase in pension costs).

Wage levels of permanent disability claimants rose quite sharply during the 1980-1984 period (at an average annual rate of about 27 percent). Insufficient data were available to the study to isolate the contribution of wage changes to pension cost increases during the 1980-1984 period. Evidence, however, does indicate that rising wages played a major role in pension payment increases during this segment of the study period. The effect of wage increases during the latter portion of the period, however, was much smaller. During this period, wages increased only 4 percent annually (on average) and, after adjustment for inflation, experienced declines. This factor accounted for only 15 percent of the cumulative increase in pension costs during the 1985-1988 period.

Exhibit VI-5
Average pre-accident wages of new PPD
WCB of Manitoba, 1985 - 1988 (actual and adjusted for inflation)



Source: Annual Reports and custom tabulations prepared by WCB of Manitoba for PMS&K

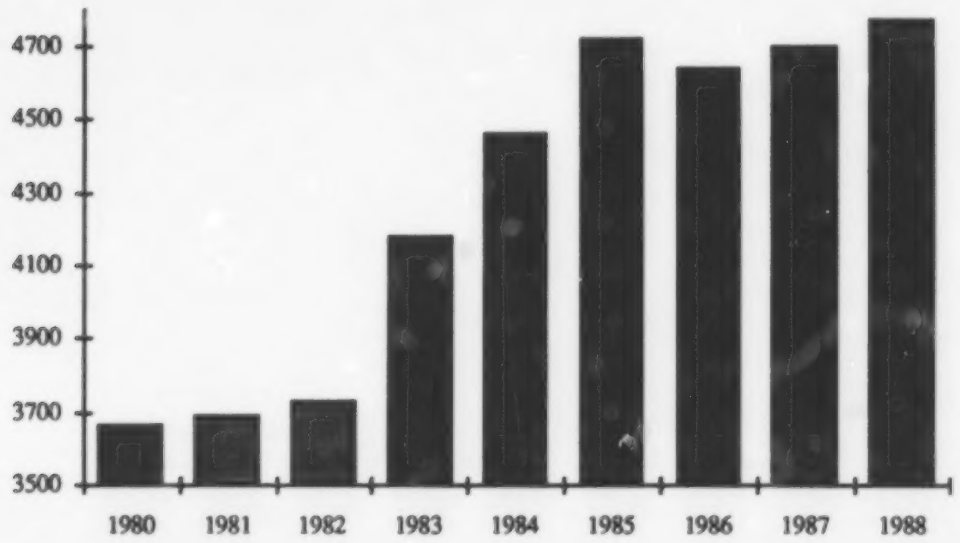
Biennial indexing of pension payments contributed to substantial increases in pension costs during the study period. This factor accounted for roughly 25 to 35 percent of the cumulative increase in pension costs during the study period.

The lack of a computerized data base prior to 1984 made it impossible to directly measure the effects of biennial indexing on pension costs. WCB staff, however, provided data concerning indexing costs in the form of changes to the present value of future pension obligations (i.e. the capitalized value of indexing). Translation of this information into estimates of annual payments suggests that during the study period, biennial indexing of benefits accounted for roughly 25 to 35 percent (or $20 to $27 million) of the $79 million cumulative increase in pension costs.

C. CLAIM VOLUME

During the study period, the number of permanent disability pension recipients increased by roughly 30 percent from 3,667 in 1980 to 4,774 in 1988. Most of the increase occurred between 1982 and 1985. During the early portion of the study period, increased pension volumes represented the major source of expenditure increases.

Exhibit VI-6
Number of permanent disability pension recipients
WCB of Manitoba, 1985 - 1988

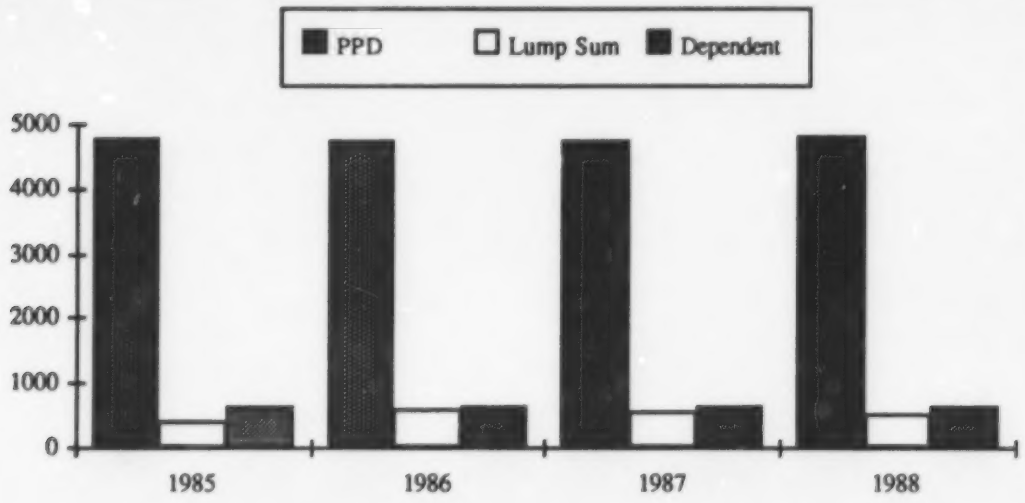


Source: Annual Reports and custom tabulations prepared by WCB of Manitoba for PMS&K

As illustrated in Exhibit VI-6, a significant increase (26 percent or 985 claims) in the number of permanent disability pensions occurred during the 1982-1985 segment of the study period. Although insufficient data were available to estimate the effect of volume increases during the early portion of the study, this factor clearly played a major role in pension cost increases and probably accounted for the majority of increased costs during the 1980-1985 period.

The substantial increase in pension costs experienced during the 1985-1988 period was not attributable to changes in claim volumes. During this period, permanent disability claim volumes remained relatively stable at approximately 4,700 claims.

Exhibit VI-7
Pension claimants by type
WCB of Manitoba, 1985 - 1988



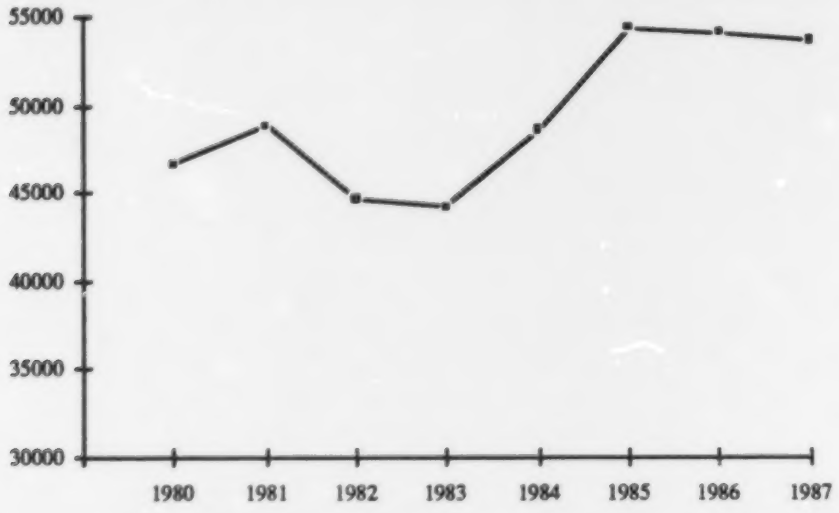
Source: Annual Reports and custom tabulations prepared by WCB of Manitoba for PMS&K

Exhibit VI-7, which presents data on the number of PPD, lump sum and survivor (dependent) benefit claims for 1985-1988, illustrates the general stability of claim volumes which characterized this segment of the study period. The stability in claim volumes implies that this factor had little effect on pension cost increases during the latter half of the study period.

The number of reported accidents did not vary dramatically during the study period and did not contribute to significant changes in the volume of pension claims or pension costs.

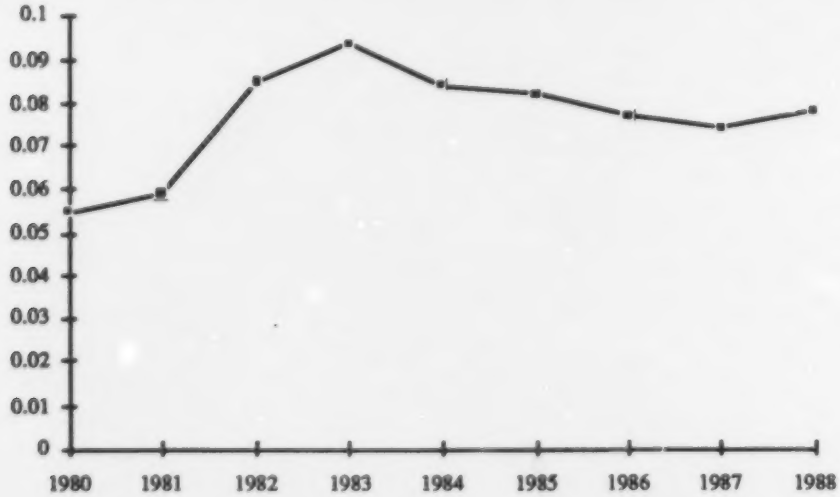
During the study period, the number of reported accidents increased by 13 percent from 46,627 (in 1980) to 52,872 (in 1988). Annual data presented in Exhibit VI-8, however, reveals that substantial declines in reported accidents occurred during the 1982-1984 period. The number of reported accidents rebounded in 1985 to levels slightly higher than at the outset of the period and remained largely unchanged during the 1985-1988. The pattern of reported accidents is negatively correlated with the pattern of unemployment (See Exhibit VI-9). This situation, which is not surprising, illustrates the dampening effect of an economic slowdown on accident frequency. In general, however, the number of accidents reported does not appear to have a strong relationship with either pension claim volumes or cost increases during the study period.

Exhibit VI-8
Number of reported accidents
WCB of Manitoba, 1980 - 1988



Source: Annual Reports and custom tabulations prepared by WCB of Manitoba for PMS&K

Exhibit VI-9
Average rate of Manitoba unemployment, 1980 - 1988

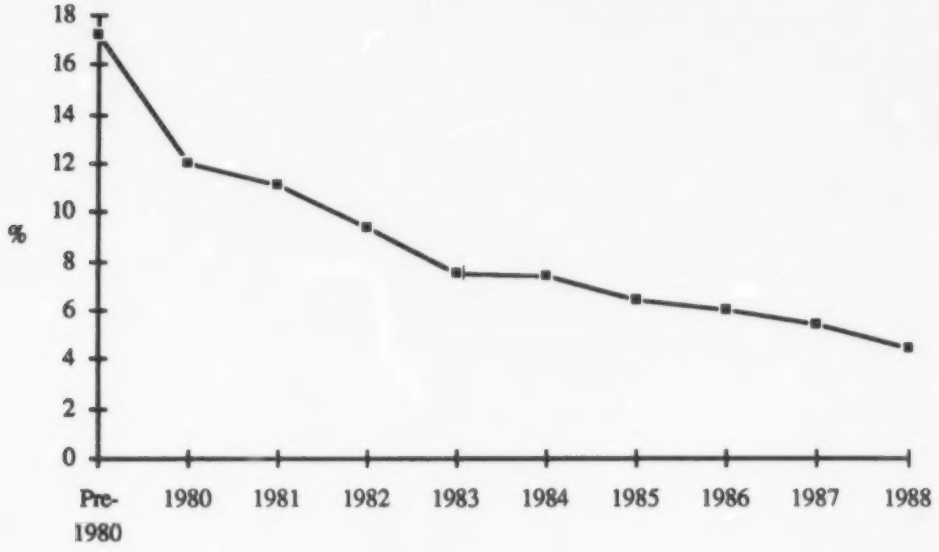


Source: Annual Reports and custom tabulations prepared by WCB of Manitoba for PMS&K

D. IMPAIRMENT RATINGS

A steady decline in average impairment ratings occurred throughout the study period. This decline could not be accounted for by changes in impairment rating tables or adjudication practices. Interviews with WCB staff and other data suggest that the decline is due to the awarding of nominal permanent disability pension awards to permit benefit augmentation through special additional compensation.

Exhibit VI-10
Impairment levels of new PPD recipients by year of accident
WCB of Manitoba, 1980 - 1988



Source: Annual Reports and custom tabulations prepared by WCB of Manitoba for PMS&K

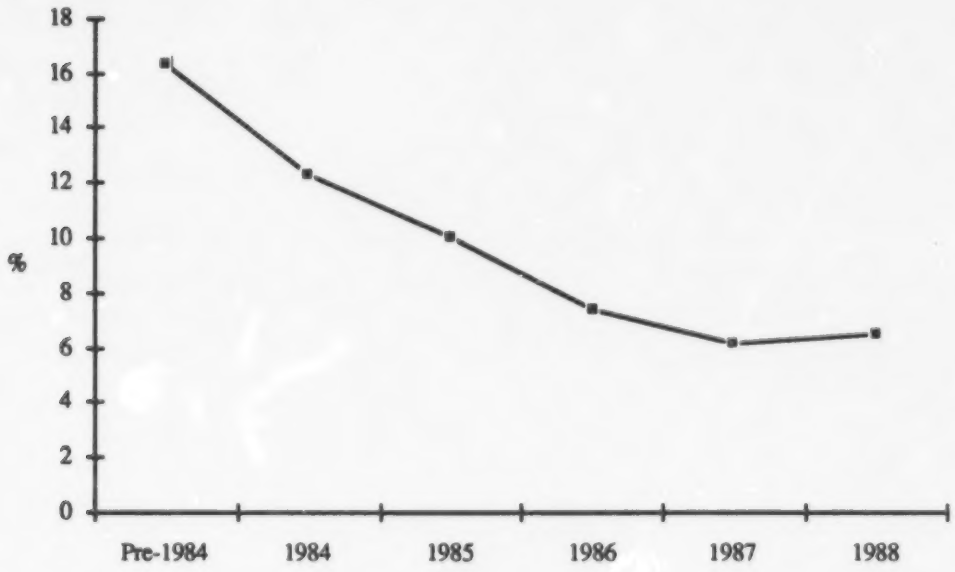
Data concerning new permanent disability pension recipients by year of accident (Exhibit VI-10) and by year of initial award (Exhibit VI-11) reveals that significant declines in the average impairment rating of PPD claims occurred between 1980 and 1988. According to WCB staff interviewed, the Board employed the same principles and schedules for assigning impairment ratings throughout the study period. As such, rating practices do not appear to account for the declining impairment rating trend.

Additional data supplied by WCB staff and confirmed through interviews suggests that although the number of very high (i.e. greater than 40 percent) impairment claims declined slightly during the period, the majority of the decline in average impairment ratings

occurred as a result of the more frequent awarding of nominal (or token) impairments to qualify injured workers for special additional compensation benefits. As such, the effect of declining of impairment ratings on costs appears to have been modest.

It is also interesting to note that a slight increase in the average impairment rating occurred in 1988. This increase may reflect recent board policy changes which resulted in fewer new nominal or token impairment awards.

Exhibit VI-11
Impairment levels of new PPD recipients, by year of initial award
WCB of Manitoba, Pre-1984 - 1988



Source: Annual Reports and custom tabulations prepared by WCB of Manitoba for PMS&K

E. BENEFIT AUGMENTATION POLICY

The conversion of SAC benefits to permanent disability pensions appears to have contributed to much of the increase in pension costs experienced during the latter half of the study period. Although specific data on this issue were not available, evidence suggests that this factor played the major role in cost increases during the 1985-1988 period.

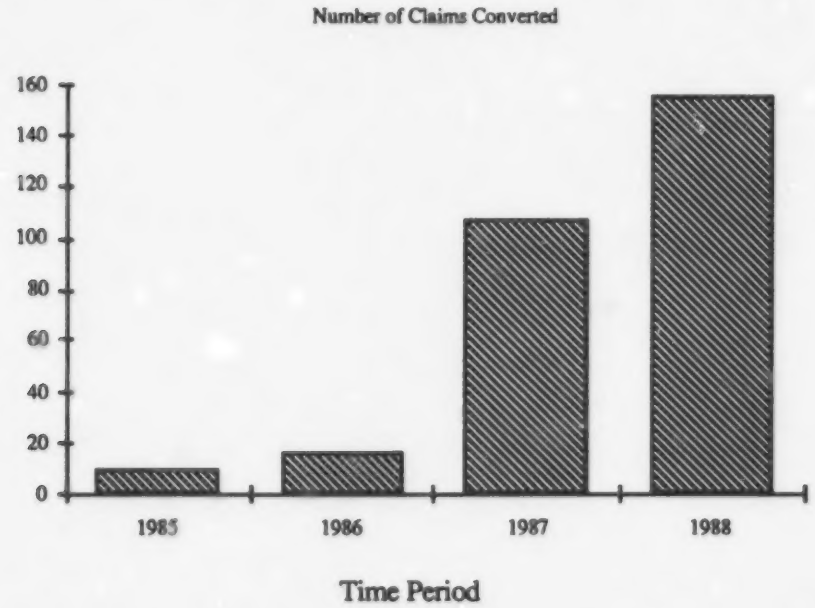
The 1985 Board policy regarding benefit augmentation led to the more widespread and generous awarding of special additional compensation (SAC) payments to injured workers. As noted earlier in this section, legislation requires the existence of a permanent disability rating to allow for SAC awards. According to WCB staff interviewed, a large

number of workers were awarded token or nominal impairment ratings during the 1985-1987 period to enable qualification for temporary SAC (typically for less than 3 years).

SAC claimants were typically referred to the Board's vocational rehabilitation program for additional assistance and appear in claimant statistics for vocational rehabilitation after 1984. According to vocational rehabilitation staff, many SAC claimants did not have successful rehabilitation programs and services were eventually terminated without claimants returning to employment. For these claimants, the SAC portion of support was converted (capitalized) to permanent pension payments following termination of vocational rehabilitation services. The transfer of budget responsibility for SAC claims from vocational rehabilitation to the Board's pension account appears to be the single most important factor contributing to the rapid rise in pension costs during the latter half of the study period.

Although incomplete, data supplied by WCB confirmed the importance of SAC conversions to pension cost increases during the latter half of the study period. As illustrated in Exhibit VI-12, the estimated number of SAC awards converted to pensions increased sharply from less than 10 in 1985 to 155 in 1988.

Exhibit VI-12
Estimated number of SAC claims converted to permanent disability pensions, WCB of Manitoba, 1985 - 1988



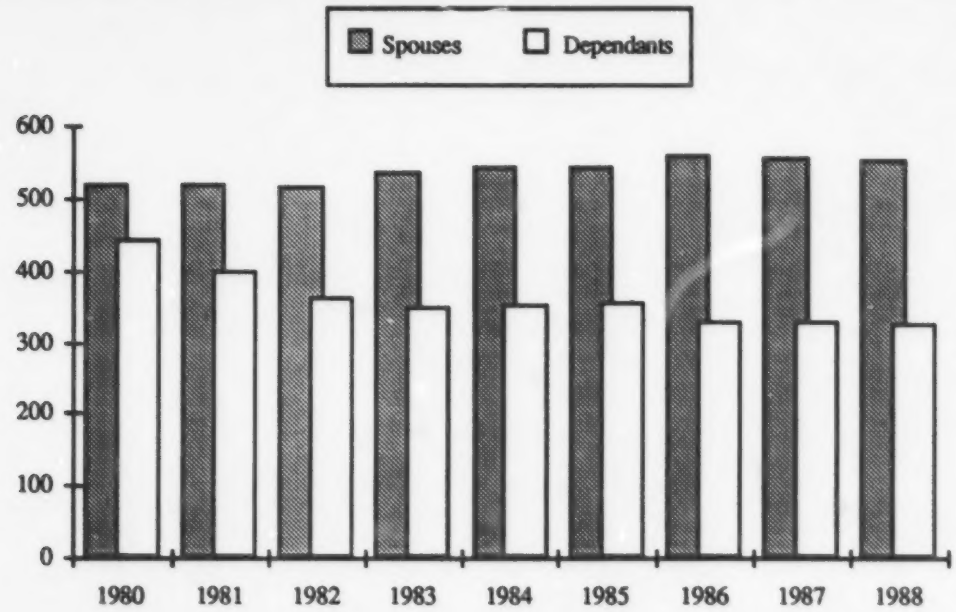
Claims	<10	16	107	155

Source: Research and Planning, WCB of Manitoba

F. SURVIVOR BENEFIT CLAIMS

Changes in the number of survivors of fatally injured workers did not contribute to increased pension costs. Although the number of spouses receiving support increased by six percent during the period, the number of other dependents (e.g. children) declined by 37 percent.

Exhibit VI-13
Survivor benefit recipients
WCB of Manitoba, 1980 - 1988



Source: Annual Reports and custom tabulations prepared by WCB of Manitoba for PMS&K

Exhibit VI-13, which illustrates the number of survivor benefit recipients by type, reveals that the number of surviving spouses increased modestly during the study period from 522 in 1980 to 554 in 1988 (a six percent increase). This trend, however, was offset by a sharp reduction in the number of other dependents receiving pension supports (from 444 claimants in 1980 to 325 claimants in 1988). The net effect of these changes in survivors has been to reduce pension costs by a small amount (less than $0.3 million in 1988).

VII

VOCATIONAL REHABILITATION EXPENDITURES

Prior to 1982 changes in WCB policy, vocational rehabilitation formed a very small component of the services available to injured workers. The program was reserved for workers who had sustained quite severe injuries and workers who received major permanent disability awards. The program's major focus at that time was the direct placement of disabled workers in jobs. Formal or on-the-job re-training formed only a small component of rehabilitation services provided by the Board. In general, workers without a rateable disability were excluded from vocational rehabilitation assistance.

Partially in response to recommendations contained in the Lampe (1981), Cooper (1982) and the Rehabilitation 100 Committee (1984) reviews of WCB operations, the Board adopted a much more liberal philosophy concerning access to vocational rehabilitation services. The change in philosophy extended rehabilitation assistance to all injured workers who, as a result of a compensable injury, were unable to resume employment. Services were now to be made available until the worker returned to employment at or near the pre-injury income level or until the worker developed the potential for future earnings at a similar income level. The major effect of these policy changes was to greatly expand the number of workers eligible for rehabilitation services and the range of rehabilitation services provided by the Board.

An extensive range of vocational rehabilitation services are presently offered by the Board. These services may be grouped into five main categories, including:

1. Counselling with respect to vocational, financial, employment and social matters.

2. Evaluation and Assessment concerning medical, psychological and vocational matters.

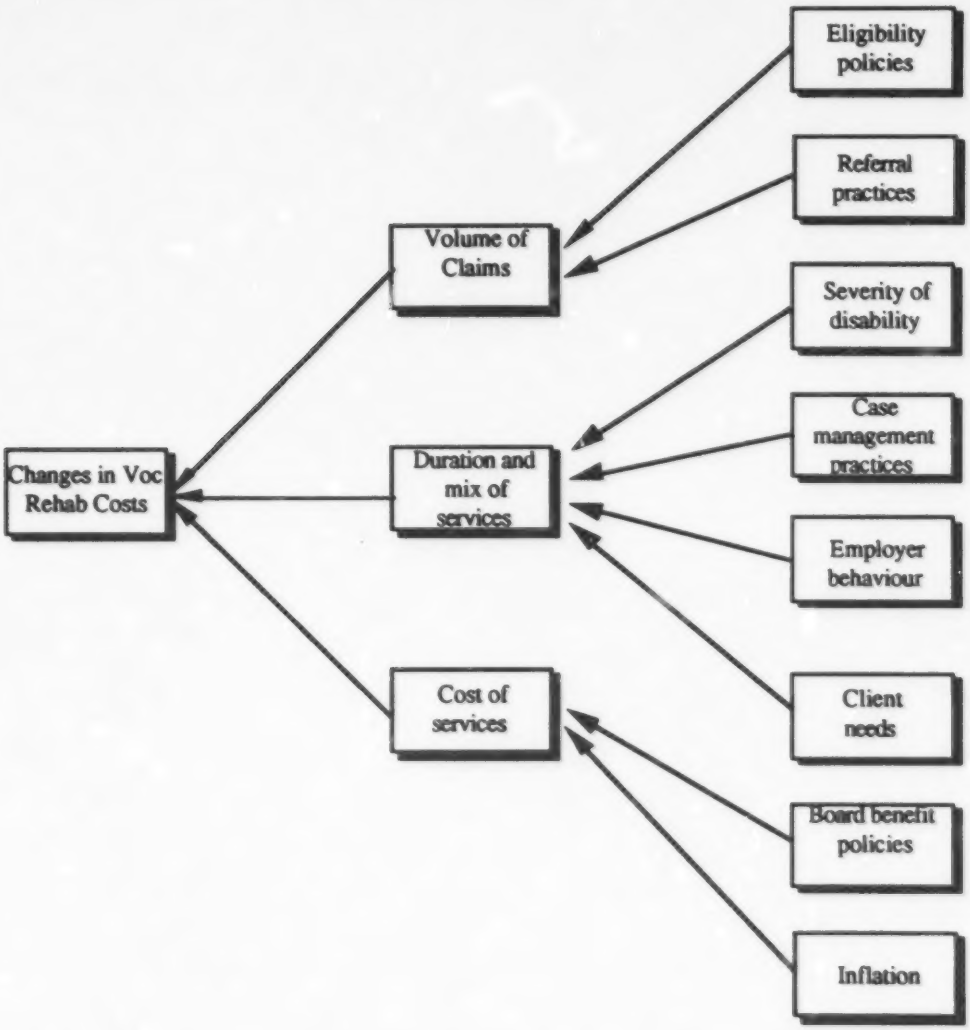
3. Rehabilitation Aids related to work place modification and the provision of appliances required to assist the worker.

4. Retraining with respect to occupational and academic skills.

5. Job Search and Placement assistance to workers ready to return to employment.

Annual vocational rehabilitation expenditures are determined by three main factors, including: the number of claimants, the mix and duration of services provided and the cost of providing individual services.

Exhibit VII-1
Elements of vocational rehabilitation costs



As with other types of benefits considered in the study, vocational rehabilitation expenditures are potentially affected by a wide range of factors. The most obvious factor is the number of claimants receiving services. Changes in vocational rehabilitation case loads are affected by external variables such as the number and severity of injuries incurred, as well as by Board policies concerning eligibility for program services. As noted above, quite dramatic changes in Board policy concerning the provision of vocational rehabilitation services occurred during the study period. Those changes represent the most significant factor affecting changes to vocational rehabilitation case loads.

Board policy can also affect vocational rehabilitation costs by altering the range and type of vocational rehabilitation services available to injured workers. During the study period, substantial expansion of the range of services (i.e. retraining assistance, job finding club and special additional compensation (SAC)) available to vocational rehabilitation clients occurred as the program implemented a more ambitious mandate. Substantial increases in vocational rehabilitation costs were incurred through service expansion.

Vocational rehabilitation costs are also affected by the duration of rehabilitation, as workers are compensated throughout (and in many cases after) the rehabilitation process. External factors affecting the severity of worker disabilities and the range of re-employment opportunities available to injured workers can influence the duration of the rehabilitation process and result in increased costs. Internal factors related to case referral and management practices, however, may also influence the duration of rehabilitation programs and result in increased costs.

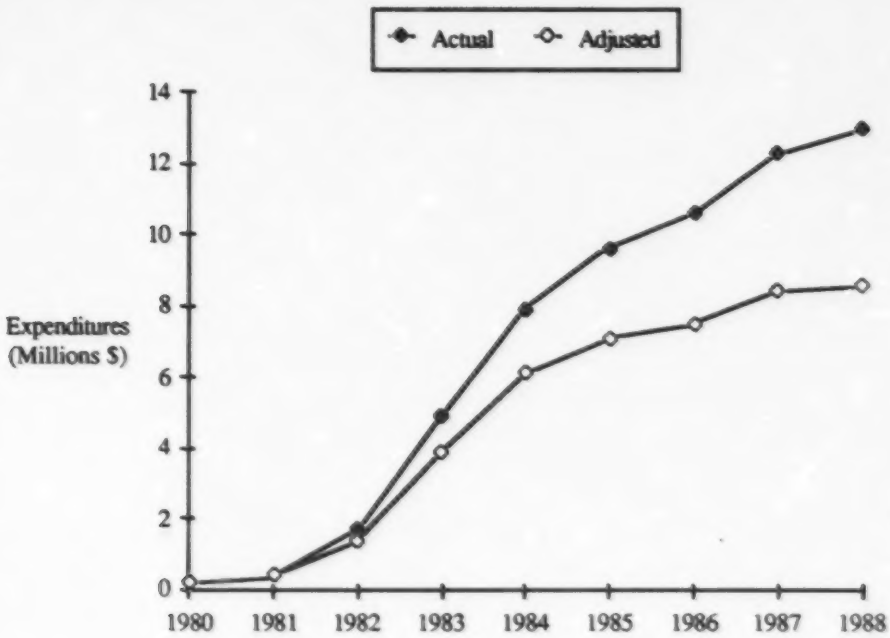
Rehabilitation costs are also affected by changes in the costs of providing individual services to workers. External economic factors (i.e. inflation) can lead to increases in the costs of various services purchased by the Board on behalf of workers (e.g. institutional training programs, prosthetic devices, etc.). Moreover, rehabilitation allowance benefits may be expected to increase in response to increases in pre-accident wage levels. Changes in costs with respect to some rehabilitation services, however, can occur in response to changes in Board policy. The most obvious example concerns the awarding of special additional compensation (SAC) payments.

Analysis of factors affecting vocational rehabilitation costs is severely constrained by the absence of statistical information spanning the 1980-1984 period. During this period, the program underwent considerable expansion and redevelopment in response to Board policy changes. Very rapid increases in program expenditures were experienced as a result of this process. In the absence of detailed data, it has not been possible to isolate the contribution of individual factors to expenditure increases for the 1980-1984 period. Detailed analysis of costs has been restricted to the 1985-1988 period for which statistical information on activities and expenditures were available.

A. TRENDS IN VOCATIONAL REHABILITATION EXPENDITURES

Expenditures for vocational rehabilitation increased from roughly $.2 million in 1980 to slightly more than $13 million in 1988, an increase of about 6400 percent during the study period.

Exhibit VII-2
Vocational Rehabilitation expenditures
WCB of Manitoba, 1980 - 1988 (Actual and adjusted for inflation



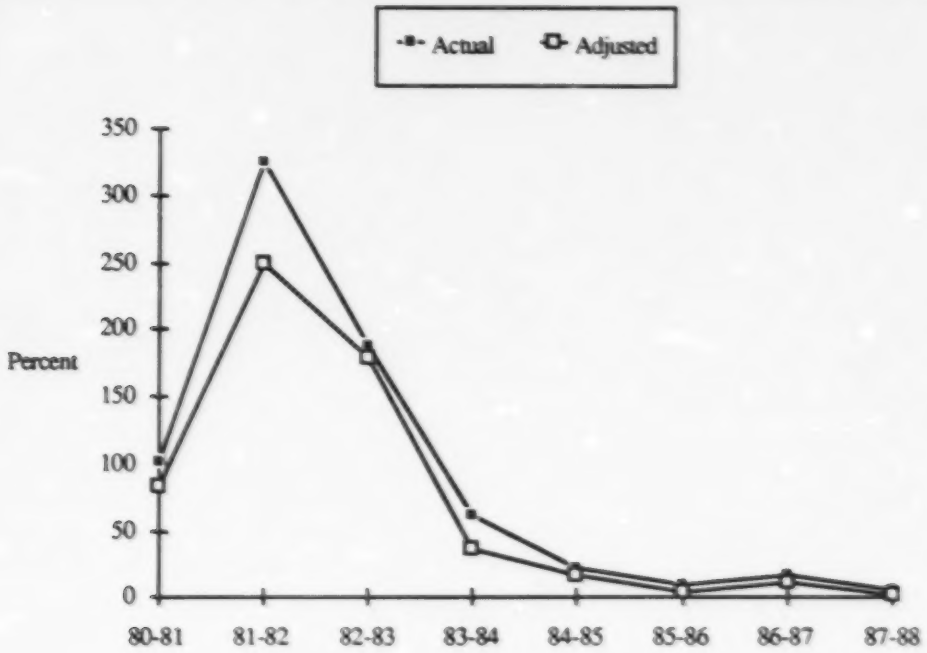
	1980	1981	1982	1983	1984	1985	1986	1987	1988
Actual	0.2	0.4	1.7	4.9	7.9	9.6	10.6	12.3	13
Adjusted	0.2	0.4	1.4	3.9	6.1	7.1	7.5	8.4	8.6

Source: Annual Reports and custom tabulations prepared by WCB of Manitoba for PMS&K

In response to the Board's policy change to greatly expand access to and utilization of rehabilitation services, very large and rapid increases in vocational rehabilitation costs occurred during the study period. Actual expenditures increased from about $200,000 in 1980 to more than $13 million in 1988. After adjustment for inflation, costs in 1988 were roughly $8.6 million, about 42 times higher than expenditures reported in 1980. During the study period, the cumulative increase in vocational rehabilitation expenditures totaled about $59 million or about 15 percent of the total cumulative increase of WCB operating costs.

Increases in vocational rehabilitation costs were particularly large during the 1981-1984 period following implementation of the new policy. During this period, the rate of expenditure increase averaged about 84 percent per year after adjustment for inflation. Substantially lower rates of increase were reported for the 1985-1988 period.

Exhibit VII-3
Annual change in Vocational Rehabilitation expenditures
WCB of Manitoba, 1980 - 1988 (Actual and adjusted for inflation



Actual	101	325	188	61.8	21.5	10.4	16	5.7
Adjusted	83	250	179	35.9	16.4	4.6	12	2.4

Source: Annual Reports and custom tabulations prepared by WCB of Manitoba for PMS&K

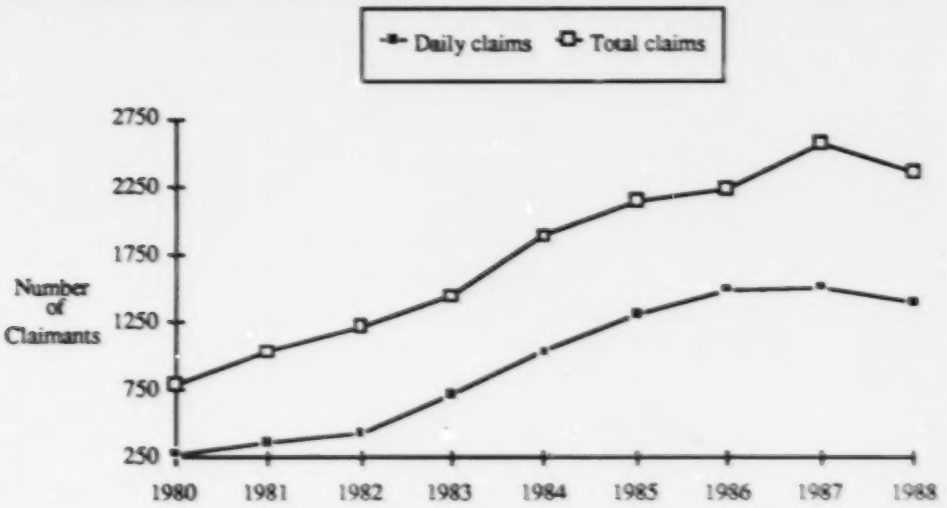
As illustrated in Exhibit VII-3, the most rapid increases in vocational rehabilitation expenditures occurred early in the study period, in particular, during the 1981-1984 period. These increases were attributable to program expansion in response to changes in Board policy. Since 1985, annual expenditure increases have been much more modest, a reflection of the maturation of the program and a return to more stable case loads. Expenditure increases during the 1985-1988 period averaged about 7.3 percent annually after adjustment for inflation.

B. CHANGES IN CLAIM VOLUME

Substantial increases in the number of rehabilitation clients occurred following the 1982 change in rehabilitation policy. This factor accounted for the vast majority of cost increases during the 1980-1985 segment of the

study period. During the 1985-1988 segment of the study period, increases in the number of clients accounted for 31 percent of cumulative increase in rehabilitation costs.

Exhibit VII-4
Total claimants and average daily case load, Vocational Rehabilitation Program, WCB of Manitoba, 1980 - 1988



	1980	1981	1982	1983	1984	1985	1986	1987	1988
Daily claims	281	365	431	722	1030	1301	1491	1504	1385
Total claims	794	1032	1221	1444	1881	2143	2232	2562	2362

Source: Annual Reports and custom tabulations prepared by WCB of Manitoba for PMS&K

The magnitude of the effect of changes in rehabilitation access policy on the client volumes is illustrated in Exhibit VII-4. Since data were not available for all annual periods, the Exhibit presents trend data estimated for the 1982-1984 segment of the study period. Although subject to some degree of estimation error, the Exhibit clearly reveals the rapid increase in vocational rehabilitation claimants experienced during the study period. The number of claimants receiving rehabilitation benefits roughly tripled from 794 in 1980 to more than 2,350 in 1988. The daily case load (i.e. the number of individuals receiving benefits at any given point in time) is estimated to have increased more than fourfold, from approximately 281 workers in 1980 to 1,385 in 1988.

Increases in the number of rehabilitation clients during the 1982-1985 segment of the study period were particularly dramatic, especially in light of declines in the number of reported accidents and time loss claims. During this period, which followed changes in rehabilitation access policy, the number of claimants receiving rehabilitation benefits tripled from roughly 430 to 1,300 claimants. Although the effect of increased claim volumes on costs cannot be separated precisely from that of other factors (e.g. inflation) for the 1980-

1984 period, data strongly suggest that the vast majority of increased costs during this period occurred as a result of increased client volumes.

Expansion in the number of workers receiving rehabilitation assistance continued during the 1985-1987 period, however, a small decline in claim volume was reported for 1988. Growth in the volume of rehabilitation claims accounted for about 31 percent (or $2.2 million) of the $7 million cumulative increase in rehabilitation expenditures reported during the 1985-1988 segment of the study period.

C. CHANGES IN COST OF SERVICES

Inflation-related factors accounted for only a small portion of the increase in vocational rehabilitation expenditures during the 1980-1984 period. Inflation, however, has been a major source of increased costs since 1985. This factor accounted for roughly 46 percent of the cumulative increase in expenditures during the 1985-1988 period.

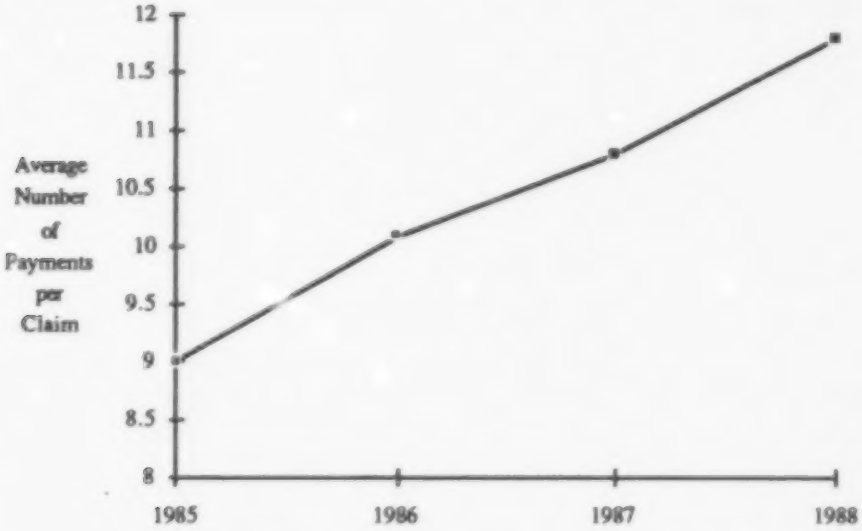
Data available to the study did not permit the isolation of inflation related effects on rehabilitation costs for the 1980-1984 period. While it is clear that rates of inflation were generally high during the 1980-1983 period, the rehabilitation expenditures during those years were quite small. While inflation did contribute to increased costs during the early portion of the study period, its contribution to increased costs was secondary to that of program expansion.

Detailed statistical data for the 1985-1988 segment of the study period reveal that the average cost per rehabilitation service (e.g. institutional training, rehabilitation, allowances, etc.) increased by about 26 percent from $355 to $443. These increases, largely attributable to inflation, accounted for about 46 percent (or $3.2 million) of the $7 million cumulative increase in rehabilitation expenditures reported during the 1985-1988 period.

D. CHANGES IN DURATION AND MIX OF REHABILITATION SERVICES

Lengthening of the rehabilitation process and the use of a more extensive range of services accounted for about 24 percent of the cumulative increase in rehabilitation costs during the 1985-1988 period. The contribution of these factors to cost increases prior to 1985 remains unknown.

Exhibit VII-5
Average number of services (payments) per claimant
Vocational Rehabilitation Claims
WCB of Manitoba, 1984 - 1988



	1985	1986	1987	1988
Payments	9	10.1	10.8	11.8

Source: Annual Reports and custom tabulations prepared by WCB of Manitoba for PMS&K

Data available to the study for the 1985-1988 period reveal a trend toward longer rehabilitation periods. Exhibit VII-5 indicates that the average number of services (per claimant) paid by the Board increased by 31 percent during the 1985-1988 period from 9 to 11.8. This increase reflects two factors, including programmatic or case management changes implemented by the Board and increases in the average duration of rehabilitation programs. According to rehabilitation staff interviewed, considerable improvements to case management were realized with the adoption of formal case management principles in 1985. These principles established more thorough procedures for assessing the rehabilitation needs of clients and led to more extensive use of a broader range of services including retraining and job search. Prior to 1985 worker assessment and service provision were regarded to be quite subjective and ad hoc in nature.

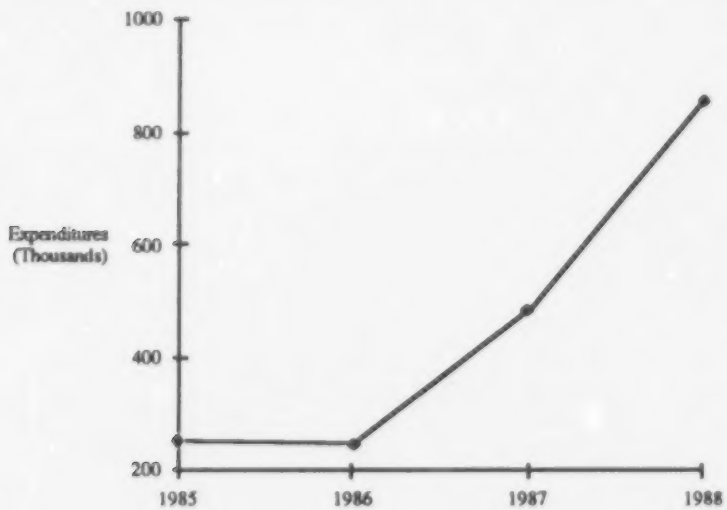
More extensive and frequent use of rehabilitation services, however, has also translated into longer rehabilitation periods and higher costs. Several indicators investigated for this study including backlogs (i.e. payments to workers awaiting action, Exhibit VII-6), the proportion of active rehabilitation clients who were referred to the program in prior years (Exhibit VII-7) and the average duration of settled rehabilitation cases (Exhibit VII-8) clearly suggest that the duration of rehabilitation programs increased sharply during the 1985-1988 period. Lengthening of rehabilitation periods may also have

contributed to additional temporary time loss costs by delaying entry to vocational rehabilitation services. The effect of delays on compensation costs could not be measured with available data.

In part, lengthening of the duration of rehabilitation claims has occurred as a result of increasing numbers of wage loss and SAC benefit recipients. Longer rehabilitation periods, however, also appear to be related to increased use of institutional training programs and the extension of broader range of services to claimants.

The combination of factors related to case management and claim duration jointly accounted for 24 percent (or about $1.7 million) of the $7 million cumulative increase in rehabilitation expenditures reported during the 1985-1988 period.

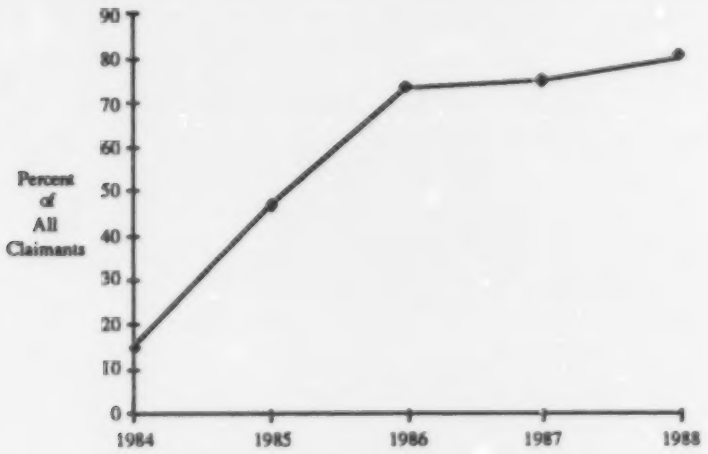
Exhibit VII-6
Payments to Vocational Rehabilitation claimants awaiting service
WCB of Manitoba, 1985 - 1988



$ x 1000	252.7	246.4	483.1	856.6

Source: Annual Reports and custom tabulations prepared by WCB of Manitoba for PMS&K

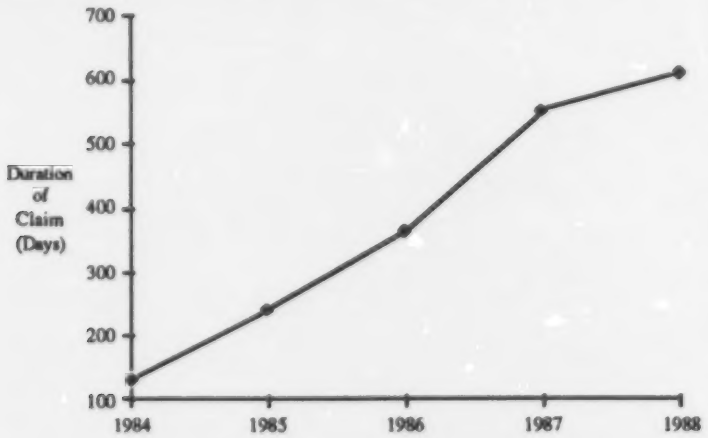
Exhibit VII-7
Proportion of Vocational Rehabilitation claimants referred in previous years
WCB of Manitoba, 1984 - 1988



	1984	1985	1986	1987	1988
%	15.1	46.9	73.8	75.1	80.7

Source: Annual Reports and custom tabulations prepared by WCB of Manitoba for PMS&K

Exhibit VII-8
Average duration of settled Vocational Rehabilitation claims
WCB of Manitoba, 1984 - 1988

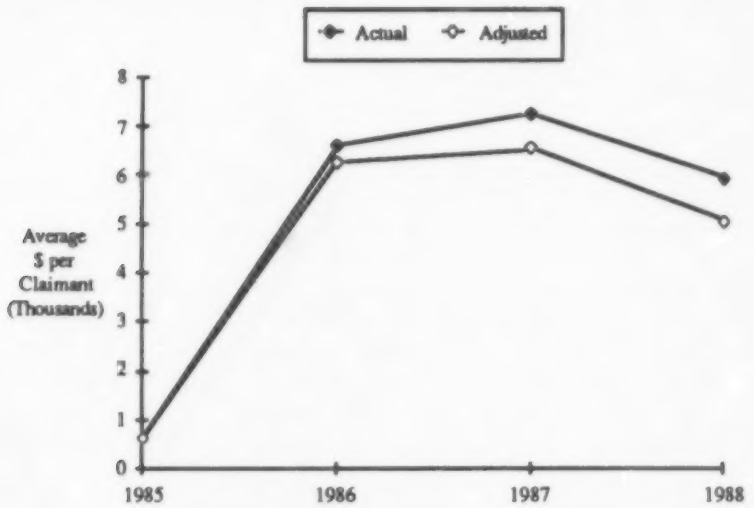


	1984	1985	1986	1987	1988
Days	132.7	240.3	365.3	553	608.8

Source: Annual Reports and custom tabulations prepared by WCB of Manitoba for PMS&K

Much of the increase in costs resulting from changes in service mix and claim duration are attributable to more frequent and generous special additional compensation (SAC) awards.

Exhibit VII-9
Average expenditure per claimant for special additional compensation (SAC) WCB of Manitoba, 1985 - 1988



Actual	0.61	6.632	7.284	5.933
Adjusted	0.61	6.28	6.557	5.071

Source: Annual Reports and custom tabulations prepared by WCB of Manitoba for PMS&K

The most pronounced shift in the mix of services provided to rehabilitation claimants during the 1985-1988 period involved the more frequent and more generous awarding of special additional compensation payments. This change resulted from a Board policy directive in 1985 which provided for greater augmentation of benefits to workers with physical impairments which were not reflective of the degree of earning impairment. The precise contribution of the more liberal use and awarding of SAC's on rehabilitation cost increases is difficult to determine, as data suggest that the use of SAC benefits may have offset a portion of the costs related to wage replacement and rehabilitation allowance benefits. SAC expenditures, however, clearly rose much more quickly than those associated with other forms of rehabilitation compensation during the 1985-1988 period (Exhibit VII-9) and contributed to significant incremental increases in rehabilitation expenses.

Several other significant changes in rehabilitation policy and operating practices occurred during the study period as the new rehabilitation program was implemented. Although these changes impacted on costs, data were not available to measure the individual contributions to increased costs.

Interviews with vocational rehabilitation staff uncovered several additional factors which are believed to have resulted in increased rehabilitation costs during the study period. Most of these factors related to changes in the operating practices or policies of the Board. These factors are summarized below:

1. The general isolation of the vocational rehabilitation department from other functional units of WCB resulted in fragmentation of case management functions, problems with respect to the timing of referrals and confusion concerning financial responsibility for claimant support. Accountability of vocational rehabilitation to the rest of the WCB system was believed to be almost non-existent, as evidenced by the fact that the department did not prepare formal budgets until 1982 and operated without formal guidelines until 1985. The budget and operational planning process during the 1982 to 1985 period was regarded to be highly informal, not approved in advance nor subject to normal operating controls and accountability procedures.

2. The 1982 Board policy requiring benefit levels for wage replacement and allowances for rehabilitation clients to be set according to the level for temporary time loss benefits, as opposed to the ad hoc procedures employed prior to that time had the effect of raising rehabilitation allowance benefits.

3. The 1986 Board directive extending the authority of vocational rehabilitation counsellors to award up to 52 weeks of benefits without management approval and for the Director of Rehabilitation to award benefits beyond 52 weeks without consulting more senior management contributed to increased costs by lengthening the period of rehabilitation benefits.

VIII

ADMINISTRATIVE COSTS

The final component of costs addressed in this study relates to expenditures incurred in the administration of the Board's programs. Four categories of administrative costs were considered, including:

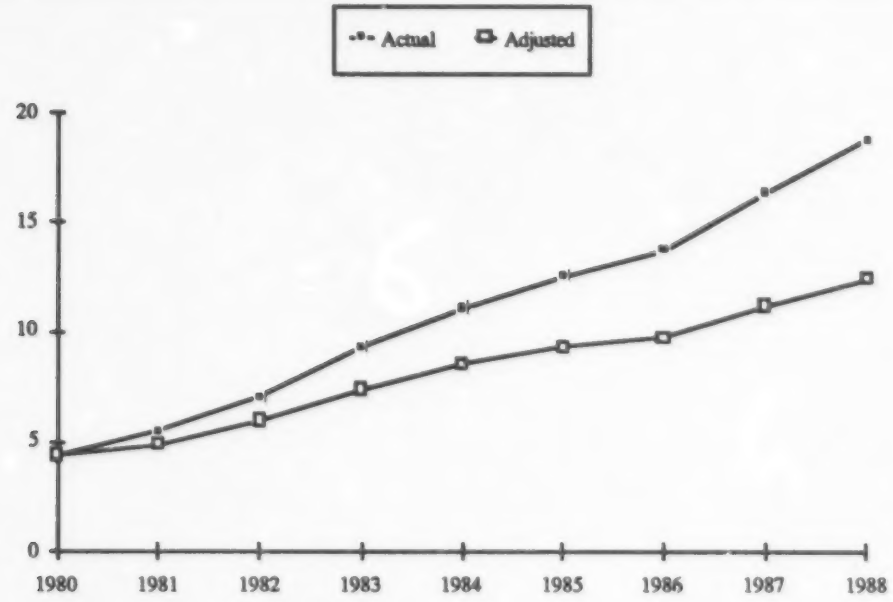
- **Salary Costs** consisting of the wages and benefits paid to WCB staff.
- **Non-salary Operating Costs** consisting of expenditures related to materials and supplies, the operation of the Board's physical plant and the acquisition of external services (e.g. data processing, consulting services).
- **Workplace Safety and Health Costs** consisting of salary and non-salary expenditures related to the Board's obligations under the Workplace Safety and Health Act (e.g. workplace inspections and testing).
- **Worker Advisor Program Costs** consisting of salary and non-salary expenditures related to operation of the Worker Advisor Program (since 1982).

Although responsible for costs incurred under the Workplace Safety and Health Act and the Worker Advisor Program, the Board does not exercise direct control over these cost components. Financial responsibility for these components is established through provincial legislation.

Total administrative costs grew from $4.4 million in 1980 to $18.8 million in 1988, an increase of about 424 percent. During the period, the cumulative increase in administrative costs totaled about $66 million and accounted for approximately 17 percent of the total increase in WCB operating costs.

As illustrated in Exhibit VIII-1, administrative costs rose steadily throughout the study period. Actual expenditures grew at an average annual rate of about 18 percent. After adjustment for inflation, costs increased at the average rate of about 13 percent annually. Increases in administrative costs exceeded the rate of inflation every year during the study period and with the exception of vocational rehabilitation, exceeded increases in program benefit costs (i.e. compensation, pensions).

Exhibit VIII-1
Total administrative expenses



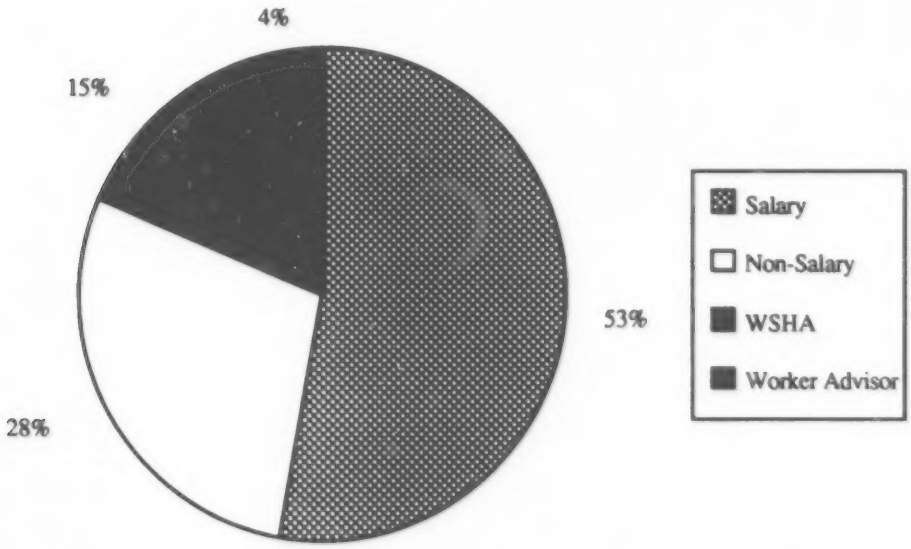
	1980	1981	1982	1983	1984	1985	1986	1987	1988
Actual	4.4	5.4	7	9.3	11.1	12.5	13.8	16.4	18.8
Adjusted	4.4	4.9	5.9	7.4	8.5	9.3	9.8	11.2	12.4

Source: Annual Reports and custom tabulations prepared by WCB of Manitoba for PMS&K

Staff salaries and benefits accounted for the largest portion of administrative increases (about 53 percent), followed by non-salary operating expenses (28 percent), responsibilities under the Workplace Safety and Health Act (14 percent) and the Worker Advisor Program (4 percent).

In general, the distribution of administrative cost increases among components (Exhibit VIII-2) was similar to the pattern of administrative expenditures in 1988. Staff salary and benefit costs accounted for the majority of the cumulative increase in administrative costs (53 percent). In 1988, this cost component accounted for 54 percent of total administrative expenditures. Non-salary operating costs accounted for the second largest share of the cumulative increase in administrative expenditures (27 percent) during the study period. Activities under the Workplace Safety and Health Act and the Workers Advisor Program contributed to 14 and 4 percent of the cumulative cost increase, respectively.

Exhibit VIII-2
Administrative expenditures by cost component
WCB of Manitoba, 1980 - 1988



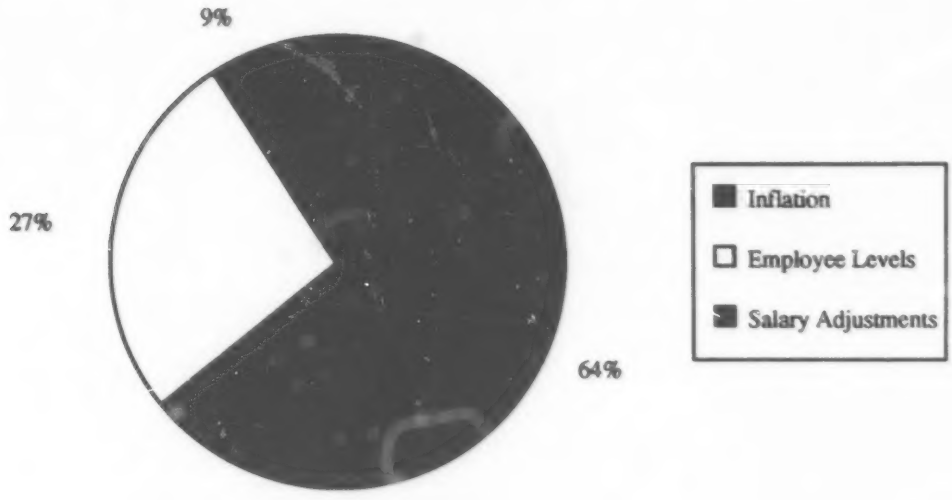
Source: Annual Reports and custom tabulations prepared by WCB of Manitoba for PMS&K

A. SALARY EXPENDITURES

Inflation represented the single most important factor in staff salary and benefit increases. This factor contributed to about 64 percent of the cumulative increase in staffing costs during the period.

During the 1980-1988 period, the cumulative increase in staff salary and benefit costs totaled about $35 million. Approximately 64 percent (or $22.5 million) of this increase was associated with inflation.

Exhibit VIII-3
Factors contributing to salary cost increase
WCB of Manitoba, 1980 - 1988

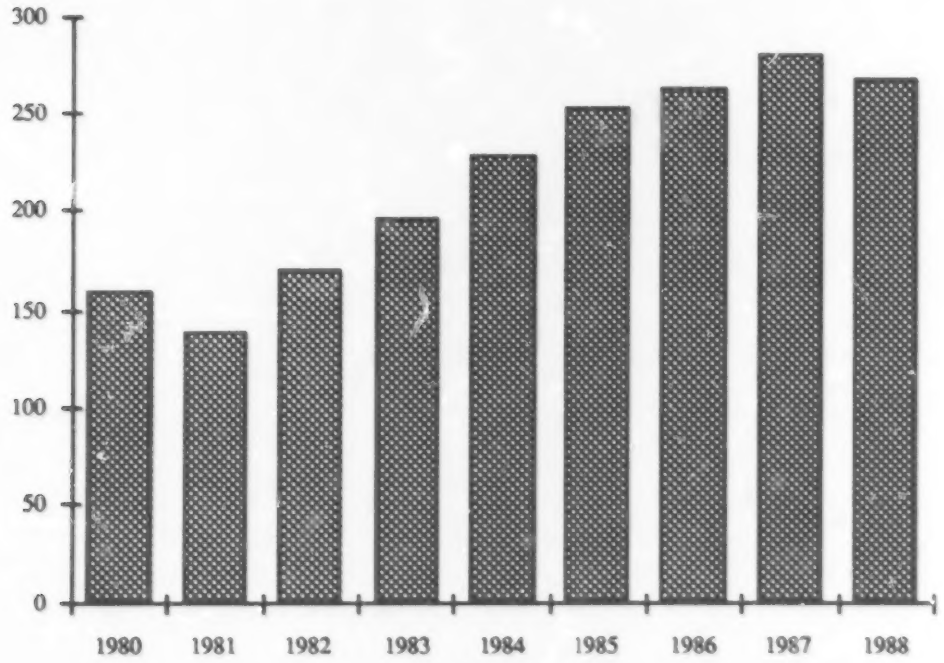


Source: Annual Reports and custom tabulations prepared by WCB of Manitoba for PMS&K

During the 1980-1988 period, the number of WCB staff increased by 69 percent from 159 to 268. Staff expansion accounted for roughly 27 percent (or $9.5 million) of the cumulative increase in staffing costs.

As illustrated in Exhibit VIII-4, substantial increases in the staff complement of the Board occurred during the study period. These increases, which occurred primarily during the 1982-1985 period, were undertaken to bring the Board's staff complement more in line with other Canadian Boards, to address the growing backlog of claims and to expand the Board's vocational rehabilitation program. During the mid 1980's period, for example, the staff complement of the vocational rehabilitation program increased from 3 to 30 individuals. During the study period, expansion to staffing contributed to about 27 percent (or $9.5 million) of the cumulative increase in staffing costs reported during the period.

Exhibit VIII-4
Total number of WCB staff



Source: Annual Reports and custom Tabulations prepared by WCB of Manitoba for PMS&K

Salary increases above the rate of inflation played a smaller role in increased salary costs. This factor accounted for about 9 percent (or $3 million) of the cumulative increase in staffing costs.

According to WCB staff interviewed, a number of junior staff received salary increases above the rate of inflation during the study period in attempt to remove wage inequities and through advancement to more senior positions. This factor contributed in a minor way to increases in Board's salary and benefits costs during the study period.

B. NON-SALARY EXPENDITURES

Non-salary operating expenditures increased from about $.8 million in 1980 to about $5.5 million in 1988. Inflation represented the most important factor contributing to increases in this component of administrative costs.

The Board's non-salary operating expenditures increases rapidly during the study period and accounted for about $15.7 million (or 29 percent) of the cumulative increase in administrative expenses. Inflation represented a significant factor in non-salary operating costs and accounted for about 52 percent (or $8 million) of the cumulative increase in this cost component.

The remaining increase in non-salary operating costs was attributable to many factors including expansion of the WCB physical plant to house the vocational rehabilitation program and modernization of the Board's information systems.

C. WORKPLACE SAFETY AND HEALTH ACT AND WORKERS ADVISOR EXPENDITURES

The remaining elements of administrative cost (i.e. the Workplace Safety and Health Act and Workers Advisor Program) jointly accounted for about $11.5 million of the cumulative increase in administrative costs during the study period. Inflation represented the major factor affecting increases among these cost components.

During the study period, WCB expenditures under the Workplace Safety and Health Act increased from roughly $0.9 million to $3.1 million. Cumulative cost increases for this component totaled about $8.5 million during the period. Inflation accounted for approximately 52 percent or about $4.5 million of the cumulative increase in Workplace Safety and Health Act expenditures. Expansion of WCB responsibilities under the Workplace Safety and Health Act (e.g. mine inspectors) accounted for the remaining share of cost increases associated with the component.

Expenditures associated with the Workers Advisor Program increased from about $331,000 in 1982 (the year of inception) to $363,000 in 1988. Cumulative expenditures for the program totaled roughly $2.5 million representing about 4 percent of the increase in administrative costs during the 1980-1988 period. Inflation accounted for virtually all in the increase in this component of WCB administrative costs. In fact, expenditures for the program declined by 35 percent during the period, after adjustment for inflation.